

REPORT
ON THE
1989 DISCHARGES
FROM
MUNICIPAL
SEWAGE TREATMENT PLANTS
IN ONTARIO

JUNE 1991

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**REPORT ON THE
1989 DISCHARGES FROM
MUNICIPAL STPs IN ONTARIO**

**Report prepared for :
Water Resources Branch
Ontario Ministry of the Environment**

JUNE 1991



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EXECUTIVE SUMMARY

The 1989 Municipal Discharge Report provides a comprehensive summary of the performance of all municipal and Ministry of Environment (MOE) operated Sewage Treatment Plants (STPs) in Ontario. Three parameters, Biochemical Oxygen Demand (BOD), Suspended Solids (SS) and Total Phosphorus (TP) were assessed. These parameters constitute MOE sewage effluent quality guidelines as defined in Policy 08-01 and the Canada-U.S. Water Quality Agreement.

Four hundred and twelve plants were operating in 1989. Of these, 48 plants were not assessed. Two were new plants commissioned in 1989. One had samples broken in transit before analyses were done. Thirty-five plants did not discharge to surface water in 1989. Ten plants provided insufficient data for assessment without providing reason to the MOE, as compared to 14 from 1988.

Of the 364 plants assessed, 108 (30%) exceeded the Ministry sewage effluent quality guidelines. There has not been a significant change in compliance since last year when 109 STPs out of 362 (30%) plants assessed exceeded the limits.

Specifically, 16 STPs (4% of the total number of STPs assessed) failed BOD in 1989, as compared to 15 (4%) in 1988. Forty-one (11%) failed SS in 1989, as compared to 47 (13%) in 1988. Sixty-four continuous discharge STPs and 12 non-continuous discharge lagoons (21%) failed the monthly TP requirement this year as compared to a total of 78 (22%) in 1988. Of the continuous discharge STPs in 1989, 24 plants failed TP for one month, 13 for 2 months, and 26 plants exceeded for 3 or more months.

Fifty plants failed to meet Ministry effluent guidelines for 3 successive years. Forty-six of them have improvements planned or underway. Four STPs did not report remedial action to the MOE.

Twenty STPs were assessed against the effluent limits stipulated in their Certificates of Approval (C of A). Effluent requirements in the C of A are site-specific and are generally more stringent than the Ministry guideline limits.

Kingsville Lagoon in the Southwest region did not provide sufficient data for C of A assessment. Fifteen out of the 19 plants assessed complied with their Cs of A. Four plants failed to meet their C of A limits. Two of the plants that failed their C of A limits also failed the general effluent quality criteria.

This report summarizes bypass data for mechanical plants only. The extraneous flows in those municipalities served by lagoons are bypassed at the sewer systems rather than at the plant site. Bypasses within the sewer system are regarded as combined sewer overflows and are outside the scope of this assessment report. In 1989, 177 of 244 (73%) mechanical STPs reported bypass data. This is an improvement over 1988, in which only 54% of the mechanical plants reported bypass data.

However, in 1989, only thirty-four out of 177 (19%) plants submitted the complete data set which includes volume, duration and number of instances for primary bypass and secondary bypass that occurred. Primary bypass is defined as the raw sewage that is discharged prior to primary clarification. Secondary bypass is defined as the sewage that has received solids removal at primary clarifiers but bypassed secondary biological treatment process before discharge.

In 1989, a total of $5.7 \times 10^6 \text{ m}^3$ of primary bypass and $2.3 \times 10^6 \text{ m}^3$ of secondary bypass were discharged. These volumes represent 3.0% and 1.0% of the total volume of treated effluent, respectively. The Stamford WPCP in Niagara Falls reported the highest volume of primary bypass ($1.2 \times 10^6 \text{ m}^3$ or 60% of its treated effluent volume). Belleville STP, however, is designed to provide only primary treatment for flows that exceed $55 \times 10^3 \text{ m}^3$. Belleville is allowed by its C of A to bypass secondary treatment when the raw sewage exceeds this volume during wet weather. Both the primary and the secondary bypasses are generally disinfected before discharge.

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1.0 INTRODUCTION

The 1989 Municipal Discharge Report provides a comprehensive summary of the performance of all the municipal and Ministry of Environment (MOE) operated Sewage Treatment Plants (STPs) in Ontario. Three parameters, Biochemical Oxygen Demand (BOD), Suspended Solids (SS) and Total Phosphorus (TP) were assessed against Ministry sewage effluent quality guidelines. Twenty STPs were also assessed against the BOD, SS and TP limits stipulated in their Certificates of Approval (Cs of A).

This report provides useful information for the Ministry to prioritize STPs for remedial actions. Remedial actions can ensure that fewer plants will be out of compliance in the future, improving the quality of Ontario's surface waters. The main text of this report presents a brief summary of the number of plants failing BOD, SS and/or TP requirements as outlined in the Ministry effluent guidelines and C of A limits. A comparison of plants exceeding Ministry effluent guidelines between 1986 and 1989 is also discussed. In addition, plants that did not provide sufficient data for assessment and plants that exceeded Ministry effluent guidelines in three successive years are highlighted in the text.

Four appendices accompany this report. Appendix A lists all the plants exceeding Ministry effluent guidelines and indicates if they have proposed or undertaken remedial actions.

Appendix B is a summary of the plants that did not comply with their C of A. The number of plants assessed against their C of A is limited. In 1989, 183 Cs of A were reviewed but only 57 of these which were issued in recent years had compliance limits. The remaining Cs of A contain only specifications and design objectives of treatment processes and equipment to be installed. Due to data processing problems, only 20 STPs were assessed against their Cs of A in this report. Compliance against C of A limits in the remaining 37 STPs was checked by the regional staff during the once per year plant inspection.

Appendix C provides a plant by plant summary of monthly averages for flows, concentrations and loadings of the parameters assessed, effluent guidelines, C of A limits and remedial actions.

Appendix D provides a monthly summary of duration, volume and number of instances of primary bypass and secondary bypass data. Primary bypass is defined as the raw sewage that is discharged prior to treatment at primary clarifiers.

Secondary bypass is defined as the sewage that has received solids removal at primary clarifiers but bypassed secondary biological treatment process before discharge.

2.0 SIGNIFICANCE OF BOD, SS AND TP

BOD, SS and TP have traditionally been used by pollution control engineers as indicators of plant performance and effluent quality. These parameters are used by the Ministry to assess STP compliance.

The strength of sewage is often measured by the 5 day Biochemical Oxygen Demand (BOD5) test. This is the amount of oxygen required by microorganisms to reduce the organic content in sewage to carbon dioxide, measured over a 5 day period. High BOD concentrations in the effluent is an indication of high organic content remaining in the effluent, therefore ineffective treatment was provided. Discharge of such effluent may cause oxygen depletion in receiving waters and other environmental impairment.

Removal of suspended solids in sewage effluent is important since excessive amounts of solids discharged to a water course can cause aesthetic problems and kill fish by clogging their respiratory passages (gills). Also, many trace contaminants such as metals and toxic organics are often associated with the solids.

Total Phosphorus has been identified as a major factor in the eutrophication of receiving waters. Excessive amounts of phosphorus cause rapid growth of algae and weeds. When algae and weeds die, they decompose and use up dissolved oxygen. Lack of dissolved oxygen can kill aquatic organisms.

3.0 MOE GUIDELINE ASSESSMENT CRITERIA

In this report, all STPs are assessed against the Ministry's general effluent guidelines. BOD and SS are assessed on an annual average, based on the general operating requirements of Policy 08-01, "Levels of Treatment for Municipal and Private Sewage Treatment Works Discharging to Surface Waters".

Currently, TP is assessed on a monthly average basis as specified in the Canada-U.S. Agreement on Great Lakes Water Quality (October 1983).

Table 1 summarizes the effluent requirements for various types of STPs.

TABLE 1
MINISTRY GENERAL EFFLUENT REQUIREMENTS
(Based on Policy 08-01
and Canada-U.S. Agreement, 1983)

Type of Treatment	PARAMETER		
	BOD (Annual Average Basis)	Suspended Solids (Annual Average Basis)	Total Phosphorus (Monthly Average Basis)
PRIMARY:			
Without TP Removal	30% removal	50% removal	n/a
With TP Removal	50% removal	70% removal	1.0 mg/l
SECONDARY:			
Without TP Removal	25 mg/l	25 mg/l	n/a
With TP Removal	25 mg/l	25 mg/l	1.0 mg/l
LAGOONS:			
Without TP Removal	30 mg/l	40 mg/l	n/a
Continuous TP Removal	30 mg/l	40 mg/l	1.0 mg/l
Batch TP removal	25 mg/l	25 mg/l	1.0 mg/l

n/a - not applicable

4.0 **MOE CERTIFICATE OF APPROVAL ASSESSMENT CRITERIA**

A C of A is a legal document issued by MOE approving the construction and operation of a STP. Cs of A issued in recent years are also used to stipulate the effluent quality and/or loadings of contaminants the STPs are allowed to discharge.

Prior to the construction of a STP, an environmental assessment must be performed to assess the impact of the effluent on the receiving stream. The municipality submits this assessment to MOE for consideration.

Once the site has been approved by MOE, guidelines for the operation of the STP and compliance limits for specific contaminants are established in the C of A.

Failure to comply with C of A can result in enforcement action under the Ontario Water Resources Act or the Environmental Protection Act.

5.0 **SAMPLING AND REPORTING REQUIREMENTS**

Under the requirements outlined in Policy 08-06, "Policy to Govern Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only)", STPs are required to provide a Ministry laboratory with a minimum of one influent and one effluent sample per month for analysis. Many facilities supplement this minimum requirement by doing additional analyses at their own laboratories.

Plant operators report monthly average STP flow, influent and effluent concentrations for BOD, TP and SS to the Ministry. Data are checked for accuracy at the Regional Office and then forwarded to the Ministry corporate database for processing.

In addition to reporting effluent quality, STPs also report the following information:

- Municipality
- Plant name
- Treatment type
- Region and District
- Operating authority
- Watercourse, Major Basin and Minor Basin
- IJC Designation

- Design Capacity
- Population Served
- Primary (Plant) Bypass
- Secondary Bypass

This information is available in Appendix C. The Appendix is arranged by Region (Southwest, West Central, Central, Southeast, Northeast and Northwest) and by municipality. Compliance status and remedial measures are also indicated. Regional boundaries and District Offices are shown at the beginning of each section. A summary of facilities by treatment type, operating authority and estimated hydraulic loading design capacity as well as annual average daily flow is also available at the beginning of each section. Appendix D contains the bypass data.

6.0 BACKGROUND INFORMATION OF SEWAGE TREATMENT PLANTS

At the end of 1989, sanitary sewage from systems serving over 7.2 million people was collected and treated by 412 STPs in Ontario.* Many of these plants also receive and treat wastewater discharged by industries. Some plants receive more than 40% of their flow from industries.

Sanitary sewage from the remaining population, for the most part located in rural areas, are treated by individual household septic tank and tile field systems.

Three plants started operation in 1989. They are:

Purcell	Southeast Region
Colchester	Southwest Region
Maxville Lagoon	Southeast Region

Six plants were phased out in 1989. They are:

Carleton Lodge WPCP	Southeast Region
Garden-City-Raceway	West Central Region
West Plant	West Central Region
Tottenham Lagoon	Central Region
Holtyre	Northeast Region
Kapuskasing West End	Northeast Region

Table 2 summarizes STPs by treatment type, operating agency and hydraulic loading design capacity. Table 3 summarizes STPs by treatment type, operating agency and actual annual average daily flow.

*NOTE: A STP may comprise a number of either influent or effluent discharge pipes.

STPs are operated by MOE or the municipality. Larger facilities are usually owned and operated by the municipality(ies) they serve, whereas the Ministry generally operates facilities for smaller municipalities.

In 1989, 241 STPs were operated by the Ministry and 171 were operated by municipalities. Although the Ministry operated a greater number of STPs, Table 3 shows that municipalities treated about 4 times the actual average daily flow treated by the Ministry. Conventional Activated Sludge plants treated 70% of the flow.

STPs in Ontario have a total hydraulic loading design capacity of approximately $6,040 \times 1000 \text{ m}^3/\text{day}$ ranging from $818 \times 1000 \text{ m}^3$ at the Toronto Main STP to $0.045 \times 1000 \text{ m}^3$ at Porquis Junction. Total annual average daily flow is $5,151 \times 1000 \text{ m}^3$ ranging from $779 \times 1000 \text{ m}^3$ at the Toronto Main to zero flow at those plants with no discharge in 1989. The lowest daily average flow in 1989 was $.043 \times 1000 \text{ m}^3$, which occurred at the Cana Water Pollution Control Plant (WPCP) in Pittsburg, Ontario.

Table 4 summarizes annual average daily loadings of BOD, SS and TP to Minor Basins. In 1989, a total of 92 tonnes/day of BOD, 100 tonnes/day of SS and approximately 4.5 tonnes/day of TP were discharged to receiving waters by STPs. Of the Minor Basins, Lake Ontario received the greatest loadings of all 3 parameters in 1989.

TABLE 2**DESIGN CAPACITY SUMMARY - 1989**

Treatment Type	Number			Design Capacity (1000M ³ /D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Primary	8	20	28	108.10	943.18	1,051.28
Convent. Activated Sludge	32	56	88	1,004.16	3,213.67	4,217.83
Modified Activated Sludge	1	0	1	12.27	0.00	12.27
Contact Stabilization	6	8	14	23.09	46.81	69.91
Extended Aeration	66	29	95	131.50	88.60	220.10
Trickling Filter	0	1	1	0.00	0.91	0.91
High Rate	3	2	5	18.68	77.28	95.96
Oxidation Ditch	9	2	11	11.04	9.45	20.50
Communal Septic Tank	2	3	5	2.01	1.04	3.06
Aerated Lagoon	4	3	7	8.48	12.67	21.15
Convent. Lagoon Continuous	7	9	16	7.23	29.76	36.99
Convent. Lagoon Seasonal	73	24	97	65.53	82.70	148.23
Lagoon and Spray	3	1	4	1.51	0.36	1.88
Aerated Cell Plus Lagoon	14	6	20	53.01	10.44	63.46
Conventional Lagoon Annual	9	2	11	5.53	1.78	7.31
Exfiltration Lagoon	4	4	8	4.41	3.56	7.97
Rotat. Biological Contactor	0	1	1	0.00	58.18	58.18
Total	241	171	412	1,456.55	4,580.46	6,037.08

1000M³/D: Thousands of cubic meters per day

TABLE 3**AVERAGE DAILY FLOW SUMMARY - 1989**

Treatment Type	Number			Average Daily Flow (1000M ³ /D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Primary	8	20	28	81.44	892.72	974.16
Convent. Activated Sludge	32	56	88	737.07	2,891.80	3,628.87
Modified Activated Sludge	1	0	1	7.92	-	7.92
Contact Stabilization	6	8	14	20.06	29.46	49.52
Extended Aeration	66	29	95	87.70	64.81	152.51
Trickling Filter	0	1	1	-	20.30	20.30
High Rate	3	2	5	12.64	65.72	78.36
Oxidation Ditch	9	2	11	7.08	3.56	12.64
Communal Septic Tank	2	3	5	0.09	0.11	0.21
Aerated Lagoon	4	3	7	5.59	8.10	13.69
Convent. Lagoon Continuous	7	9	16	8.07	20.27	28.34
Convent. Lagoon Seasonal	73	24	97	49.66	28.65	78.31
Lagoon and Spray	3	1	4	1.11	0.00	1.11
Aerated Cell Plus Lagoon	14	6	20	33.41	9.12	42.53
Conventional Lagoon Annual	9	2	11	2.23	0.69	2.92
Exfiltration Lagoon	4	4	8	2.82	3.06	5.88
Rotat. Biological Contactor	0	1	1	-	56.38	56.38
Total	241	171	412	1,056.89	4,094.75	5,151.64

1000M³/D: Thousands of cubic meters per day

TABLE 4

LOADING OF BIOCHEMICAL OXYGEN DEMAND, SUSPENDED SOLIDS,
AND TOTAL PHOSPHOROUS TO THE MINOR BASINS

MINOR BASIN	NO. OF PLANTS	ADF 1000 M ³ /D	AVG. CONCENTRATION (MG/L)			AVERAGE LOADING (TONNES/DAY)		
			BOD	SS	TP	BOD	SS	TP
ERIE	104	860.54	14.79	13.49	0.70	12.73	11.61	0.61
HURON	112	390.51	15.69	13.90	0.95	6.13	5.43	0.37
*JAMES BAY	31	67.66	20.90	26.98	2.58	1.41	1.83	0.17
*LK WINNIPEG EAST	13	34.71	18.17	21.76	1.30	0.63	0.76	0.05
ONTARIO	75	2912.04	13.95	16.06	0.68	40.63	46.76	1.99
OTTAWA RIVER	50	588.03	35.10	42.58	1.71	20.64	25.04	1.00
ST. LAWRENCE	15	150.64	26.18	21.19	0.94	3.94	3.19	0.14
SUPERIOR	12	90.48	60.11	63.35	1.58	5.44	5.73	0.14
TOTAL	412	5094.61				91.55	100.33	4.47

Note: *TP removal is not required for those plants discharging into these Water Basins. (MOE Policy 08-04)

ADF = Average Daily Flow

7.0 1989 STATUS ON EFFLUENT GUIDELINE ASSESSMENT

7.1 PLANTS NOT ASSESSED IN THIS REPORT

Of the 412 STPs in Ontario, 48 were not assessed because they did not provide sufficient data for assessment. Many of these did not discharge in 1989. Sufficient data is defined as 9 or more monthly observations for continuous discharge facilities in 1989 and 1 sample/month of discharge for seasonal and annual lagoons. The 48 plants can be divided into the following categories:

- No discharge to surface water

Thirty-five of the 48 plants did not discharge to surface waters. Many of these are exfiltration facilities or lagoons that did not require discharge in 1989. Table 5 summarizes these plants.

- New STPs

Two STPs were not assessed because they started operations in 1989. These plants are included in Table 6.

- Samples lost/broken during transit

One STP was not assessed because its effluent samples were broken in transit to the laboratory. This plant is included in Table 6.

- Insufficient data with no reason

The remaining 10 facilities did not provide a satisfactory explanation to the Ministry for failure to report sufficient data for assessment. These plants are listed in Table 7.

TABLE 5- STPs WITH NO DISCHARGE TO SURFACE WATER

SOUTHWEST

Kingsville	No Discharge
Markdale Lagoon	Exfiltration
McGregor Lagoon	Lagoon and Spray
Tobermory Lagoon	Exfiltration

WEST CENTRAL

Airport WPCP	No Discharge
Townsend Lagoon*	No Discharge

CENTRAL

Beaverton (Sunderland)	Exfiltration
Beeton Lagoon*	Exfiltration
Omeme Lagoon*	Lagoon and Spray
Wasaga Beach WPCP*	Exfiltration
Oshawa Harmony Creek WPCP No.1	No Discharge
Oshawa Harmony Creek WPCP No.2	No Discharge

SOUTHEAST

Embrun PV Lagoon	No Discharge
Lansdowne Lagoon*	Lagoon and Spray
Maxville Lagoon	New Plant
Munster Lagoon	Lagoon and Spray
Williamsburgh Lagoon*	No Discharge

NORTHEAST

Belle Vallee	No Discharge
Capreol Lagoon	Exfiltration
Dubreuvillie Lagoon*	Exfiltration
Jogues Lagoon	No Discharge
Kapuskasing West End*	Being Phased Out
Killarney Lagoon*	No Discharge
Larder Lake WPCP	Exfiltration
Mattawa Lagoon	Exfiltration
Opasatika Lagoon*	No Discharge
Temagami Lagoon*	No Discharge
Wahnapitae	No Discharge
Warren Lagoon*	No Discharge
White River Lagoon*	No Discharge

NORTHWEST

Beardmore Lagoon*	Exfiltration
Caramat Lagoon	Exfiltration
Madsen WPCP*	No Discharge
Terrace Bay Lagoon	Exfiltration
Terrace Bay WPCP	Exfiltration

* = MOE operated

TABLE 6
SEWAGE TREATMENT PLANTS REPORTING
A REASON FOR
INSUFFICIENT DATA FOR ASSESSMENT

SOUTHWEST

Colchester South Lagoon*	New Plant
--------------------------	-----------

SOUTHEAST

Iroquois WPCP	Samples Broken
Purcell WPCP	New Plant

TABLE 7
SEWAGE TREATMENT PLANTS REPORTING
INSUFFICIENT DATA FOR ASSESSMENT

SOUTHWEST

Kingsville Lagoon
Tilbury Lagoon

CENTRAL

Colborne WPCP	(TP only)
Lakeview WPCP	(BOD only)
Sutton WPCP	(TP only)

NORTHEAST

Cecile Trailer Park Lagoon*	
Cochrane WPCP	
Earlton Lagoon	
Ramore Lagoon*	
Smooth Rock Falls WPCP*	(SS only)

* = MOE operated

7.2 PLANTS MEETING EFFLUENT GUIDELINES

A total of 364 plants were assessed against MOE effluent guidelines. Table 8 shows that 256 plants (70% of the total assessed) met all of the Ministry effluent guideline requirements. This compliance rate is the same as in 1988, when 70% or 253 out of 362 plants assessed were in compliance.

This year, 96% of the STPs assessed met the annual requirement for BOD and 89% of the STPs met the SS annual guideline.

Policy 08-04 and the Canada-U.S. Agreement require all municipal STPs discharging into Lake Erie and recreational waterways, and STPs with a design capacity of 4546 m³/d or more and discharging into the Lake Ontario, St. Lawrence River, Lake Huron, Georgian Bay, and Ottawa River Basins to practice TP removal. Seventy-nine percent of the STPs met the monthly guideline for TP.

7.3 PLANTS EXCEEDING EFFLUENT GUIDELINES

One hundred and eight (30%) of the 364 plants assessed exceeded the Ministry's effluent guidelines by one or more parameters. Table 9 summarizes the number of STPs that exceeded guidelines. Further analysis indicates the following:

- Sixteen (4%) STPs failed BOD guidelines.
- A total of 41 (11%) STPs exceeded the guidelines for SS. Twenty-one of the plants are lagoons. Frequently, lagoons are high in SS due to algal blooms and scouring of bottom sediment from wind action. Controlling algae in lagoon effluent is a universal problem unless sand filters are used.
- Sixty-four continuous discharge STPs and 12 seasonal or annual lagoons (21% of the total STPs assessed) exceeded the limit for TP for one or more months in 1989. Of the continuous discharge plants, 24 exceeded the limit one month, 24 exceeded 2 or 3 months and 17 exceeded more than 3 months. This implies that about 7% of all the plants assessed are frequent offenders with respect to TP. Table 10 summarizes the number of continuous discharge plants exceeding TP limits on a per month basis. Diagram 1 depicts this trend schematically.

TABLE 8
SUMMARY FOR SEWAGE TREATMENT PLANTS
MEETING EFFLUENT GUIDELINES CRITERIA

Region	Total Number of STP	Number of STPs Assessed	Number of STPs Meeting Criteria for			
			All Para- meters	*BOD	* SS	**TP
SOUTHWEST	105	99	67	98	85	78
WEST CENTRAL	55	52	34	49	47	38
CENTRAL	76	68	53	66	64	57
SOUTHEAST	67	60	38	56	50	44
NORTHEAST	82	63	45	57	57	51
NORTHWEST	27	22	19	22	20	20
TOTAL ()	412	364	256 (70%)	348 (96%)	323 (89%)	288 (79%)

The figures within the parentheses are the percentage plants complying with the parameter assessed.

* SS and BOD are assessed on an annual basis.

** TP is assessed on a monthly basis; one or more months out of compliance means the plant is out of compliance for the year.

TABLE 9
SUMMARY FOR SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT GUIDELINES CRITERIA

Region	Total Number of STPs	Number of STPs Assessed	STPs Not Meeting Criteria for			
			One or MORE Parameters	*BOD	* SS	**TP
SOUTHWEST	105	99	32	1	14	21
WEST CENTRAL	55	52	18	3	5	14
CENTRAL	76	68	15	2	4	11
SOUTHEAST	67	60	22	4	10	16
NORTHEAST	82	63	18	6	6	12
NORTHWEST	27	22	3	0	2	2
TOTAL ()	412	364	108 (30%)	16 (4%)	41 (11%)	76 (21%)

The figures within the parentheses are the percentage plants non-complying with the parameter assessed.

* SS and BOD are assessed on an annual basis.

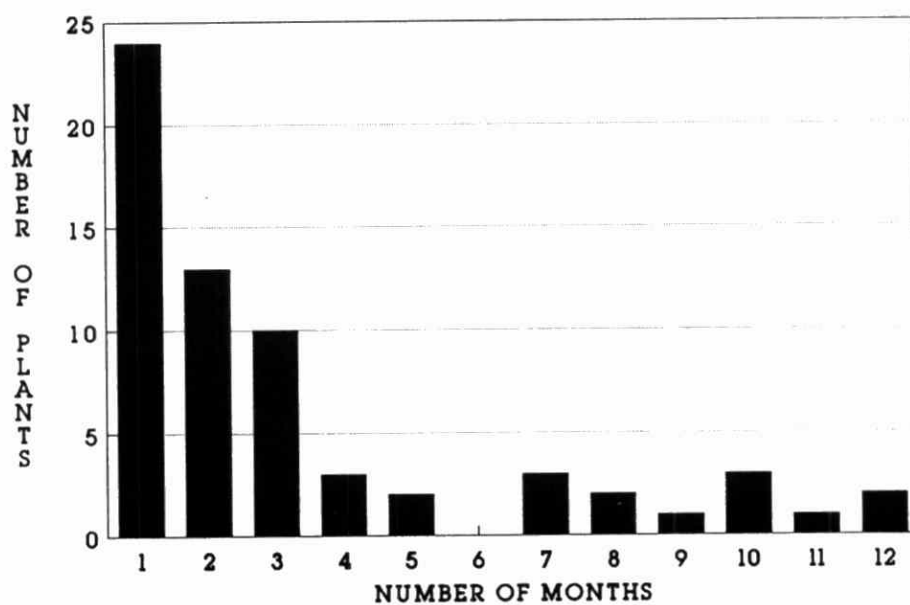
** TP is assessed on a monthly basis; one or more months out of compliance means the plant is out of compliance for the year.

TABLE 10
CONTINUOUS DISCHARGE PLANTS EXCEEDING
TOTAL PHOSPHORUS LIMITS

	NUMBER OF MONTHS EXCEEDING TP LIMIT											
REGION	1	2	3	4	5	6	7	8	9	10	11	12
SOUTHWEST	7	2	2	1	0	0	1	1	0	1	1	0
WEST CENTRAL	5	4	3	0	1	0	1	0	0	0	0	0
CENTRAL	6	2	1	0	0	0	1	0	0	1	0	0
SOUTHEAST	3	2	3	1	0	0	0	0	1	1	0	2
NORTHEAST	3	2	1	1	1	0	0	0	0	0	0	0
NORTHWEST	0	1	0	0	0	0	0	1	0	0	0	0
TOTAL	24	13	10	3	2	0	3	2	1	3	1	2

OVERALL TOTAL = 64 STPs

DIAGRAM 1 **CONTINUOUS DISCHARGE PLANTS EXCEEDING**
TOTAL PHOSPHORUS LIMITS



7.4 PLANTS EXCEEDING EFFLUENT LIMITS FOR THREE SUCCESSIVE YEARS

Fifty plants failed to meet Ministry guidelines three years in a row. Table 11 lists these plants and the parameters they failed.

Forty-six of these plants have remedial action plans in place. Depending on the causes of non-compliance, remedial action plans can take several months to several years to take effect (see section 9.0 for more details on the remedial measures program). Four plants have failed effluent guidelines three years in a row and have not reported any remedial actions to the MOE. These plants are:

Brighton Lagoon	Central Region
Warkworth Lagoon	Central Region
Russell Lagoon	Southeast Region
Virginia Town and Kearns	Northeast Region

TABLE 11-1

PLANTS EXCEEDING EFFLUENT GUIDELINES FOR THREE SUCCESSIVE YEARS

REGION: SOUTHWEST

FACILITY	1989			1988			1987			REMEDIAL PROGRAM
	BOD	SS	TP	BOD	SS	TP	BOD	SS	TP	
*BLENHEIM LAGOON		*			*	*		*		YES
CHESLEY LAGOON			*			*			*	YES
*COTTAM LAGOON		*			*			*		YES
*DRESDEN WPCP			*		*	*			*	YES
*DUTTON LAGOON		*			*			*	*	YES
*FOREST LAGOON		*			*			*		YES
GODERICH WPCP			*			*			*	YES
*GRAND BEND LAGOON		*			*	*		*		YES
*INGERSOLL NEW WPCP			*			*			*	YES
*LISTOWEL LAGOON			*			*			*	YES
*MERLIN PV LAGOON		*			*			*		YES
*POINT EDWARD WPCP	*	*	*	*		*			*	YES
*PORT BURWELL WPCP			*			*			*	YES
*RIDGETOWN LAGOON		*	*		*	*	*	*	*	YES
*RODNEY LAGOON		*			*		*	*	*	YES
*STONE PT. P.V. LAGOON		*			*			*		YES

* Operated by the Ministry of the Environment

TABLE 11-2

PLANTS EXCEEDING EFFLUENT GUIDELINES FOR THREE SUCCESSIVE YEARS

REGION: WEST CENTRAL

FACILITY	1989			1988			1987			REMEDIAL PROGRAM
	BOD	SS	TP	BOD	SS	TP	BOD	SS	TP	
ANGER AVE. WPCP		*	*	*	*	*			*	YES
*BRANTFORD WPCP			*			*			*	YES
CRYSTAL BEACH WPCP			*			*		*	*	YES
*ELMIRA WPCP			*			*			*	YES
*FERGUS WPCP		*			*			*		YES
*HESPELER WPCP		*	*		*	*			*	YES
*PORT DOVER WPCP			*			*			*	YES
*ST. JACOBS PV WPCP			*		*	*			*	YES
*WATERLOO WPCP			*			*			*	YES

* Operated by the Ministry of the Environment

TABLE 11-3

PLANTS EXCEEDING EFFLUENT GUIDELINES FOR THREE SUCCESSIVE YEARS

REGION: CENTRAL

FACILITY	1989			1988			1987			REMEDIAL PROGRAM
	BOD	SS	TP	BOD	SS	TP	BOD	SS	TP	
BALA WPCP		*			*			*	*	YES
BRIGHTON LAGOON			*			*			*	NO
COBOURG WPCP NO. 1			*	*		*			*	YES
LINDSAY LAGOON			*			*			*	YES
STAYNER LAGOON		*		*	*	*	*	*	*	YES
WARKWORTH LAGOON		*			*			*		NO

* Operated by the Ministry of the Environment

TABLE 11-4

PLANTS EXCEEDING EFFLUENT GUIDELINES FOR THREE SUCCESSIVE YEARS

REGION: SOUTHEAST

FACILITY	1989			1988			1987			REMEDIAL PROGRAM
	BOD	SS	TP	BOD	SS	TP	BOD	SS	TP	
*AMHERSTVIEW LAGOON	*	*			*			*		YES
ARNPRIOR WPCP	*	*	*	*	*	*	*	*	*	YES
BROCKVILLE WPCP		*	*			*			*	YES
*CARLETON PLACE WPCP	*	*	*		*	*		*	*	YES
GREEN CREEK WPCP		*	*	*	*	*		*	*	YES
KEMPTVILLE WPCP			*		*	*		*	*	YES
*MERRICKVILLE WPCP			*			*		*	*	YES
NAPANEE WPCP			*			*		*	*	YES
*RUSSELL LAGOON		*			*			*		NO
SMITHS FALLS WPCP			*			*		*	*	YES
*WESTPORT LAGOON			*			*			*	YES

* Operated by the Ministry of the Environment

TABLE 11-5

PLANTS EXCEEDING EFFLUENT GUIDELINES FOR THREE SUCCESSIVE YEARS

REGION: NORTHEAST

FACILITY	1989			1988			1987			REMEDIAL PROGRAM
	BOD	SS	TP	BOD	SS	TP	BOD	SS	TP	
BOB'S LAKE LAGOON	*			*			*			YES
FALCONBRIDGE TOWNSITE WPCP	*	*		*	*		*	*		YES
*KIRKLAND LAKE WPCP			*			*			*	YES
*LAKE TEMISKAMING OLD WPCP			*			*			*	YES
*STURGEON FALLS WPCP			*			*			*	YES
VIRGINIATOWN AND KEARNS WPCP	*	*		*	*		*	*		NO

* Operated by the Ministry of the Environment

TABLE 11-6

PLANTS EXCEEDING EFFLUENT GUIDELINES FOR THREE SUCCESSIVE YEARS

REGION: NORTHWEST

FACILITY	1989			1988			1987			REMEDIAL PROGRAM
	BOD	SS	TP	BOD	SS	TP	BOD	SS	TP	
*ATIKOKAN WPCP			*			*			*	YES
THUNDER BAY WPCP		*	*		*	*			*	YES

* Operated by the Ministry of the Environment

8.0 1989 STATUS ON C OF A ASSESSMENT

8.1 PLANTS NOT ASSESSED AGAINST C of A

Most certificates issued before 1985 did not specify compliance limits, but rather design or objective limits. Sixty-nine (126 of 183) percent of the Cs of A identified to date fall into this category. These C of A will not be assessed in this Discharge Report, since they were intended as a guidance rather than a regulatory document.

In recent years, more Cs of A have clearly outlined compliance limits. Many of the older Cs of A are being replaced as STPs are upgraded or expanded.

The complexity of each C of A, as well as the limitations of the MOE computer system, limited the number of STPs that could be assessed in 1989. As a result, only 20 out of 57 STPs were evaluated against their C of A in this report. The effluent limits stipulated in these C of A are presented in Appendix C along with the plant monthly average data. Compliance with C of A limits in the other 37 STPs was checked by regional staff during plant inspections.

8.2 PLANTS COMPLYING WITH C of A

Fifteen of the 19 plants assessed complied with the limits outlined in their C of A. Table 12 summarizes the number of plants, by Region, that meet their C of A limits. Kingsville Lagoon provided insufficient data for assessment.

8.3 PLANTS NOT COMPLYING WITH C of A

The following plants failed to comply with the limits as set out in their C of A:

Tavistock Lagoon	Southwest Region
Port Weller WPCP	West Central Region
Orillia WPCP	Central Region
Green Creek WPCP	Southeast Region

Table 13 summarizes the number of plants by Region, failing their C of A limits.

TABLE 12
SUMMARY FOR SEWAGE TREATMENT PLANTS
MEETING CERTIFICATE OF APPROVAL CRITERIA

Region	Total Number of STPs	Number of STPs Assessed	Number of STPs Meeting Criteria for			
			All Para- meters	*BOD	*SS	**TP
SOUTHWEST	8	7	6	7	6	7
WEST CENTRAL	2	2	1	1	2	2
CENTRAL	5	5	4	5	5	4
SOUTHEAST	2	2	1	1	1	1
NORTHEAST	3	3	3	3	3	3
NORTHWEST	0	0	0	0	0	0
TOTAL ()	20	19	15 (79%)	17 (89%)	17 (89%)	17 (89%)

The figures within the parentheses are the percentage plants complying with the parameter assessed.

TABLE 13
SUMMARY FOR SEWAGE TREATMENT PLANTS
EXCEEDING CERTIFICATE OF APPROVAL CRITERIA

Region	Total Number of STPs	Number of STPs Assessed	STPs Not Meeting Criteria for			
			One or MORE Parameters	*BOD	* SS	** TP
SOUTHWEST	8	7	1	0	1	0
WEST CENTRAL	2	2	1	1	0	0
CENTRAL	5	5	1	0	0	1
SOUTHEAST	2	2	1	1	1	1
NORTHEAST	3	3	0	0	0	0
NORTHWEST	0	0	0	0	0	0
TOTAL ()	20	19	4 (21%)	2 (11%)	2 (11%)	2 (11%)

The figures within the parentheses are the percentage plants non-complying with the parameter assessed.

9.0 REMEDIAL MEASURES

9.1 TIME REQUIRED FOR REMEDIAL MEASURES TO TAKE EFFECT

There can be many reasons for STP non-compliance. Non-compliance can arise as a result of inadequate process operations, equipment breakdowns, industrial spills into the municipal sewerage systems. These problems can be quickly corrected by improving the plant operations and maintenance program, and enforcing the industrial sewer use control program more diligently. Non-compliance can also be caused by poor process design, hydraulic overloads due to wet weather run-offs or rapid population growth. In these cases, the problems must be corrected by plant modification or expansion which can require up to 5 years to complete.

Plant modification/expansion entail several steps. The owner of the plant first initiates a class environmental assessment which involves a review of the problem and determination of the remedial options by a consultant. The consultant proposal and funding requirements must be approved by the municipal council and the Ministry of Environment before detailed plant design and construction can begin. As an example, the Hespeler STP started its class environmental assessment process in 1985 and is beginning to construct the final phase of plant expansion this year.

9.2 STATUS OF REMEDIAL MEASURES

Forty-two STPs which exceeded effluent guidelines in 1988 (35 of which reported remedial programs) improved their operations or upgraded their facilities sufficiently to meet Ministry guidelines in 1989. Appendix A shows that sixty-seven STPs continued to exceed effluent guidelines in 1989. Forty-one plants that complied in 1988 exceeded the limits in 1989.

Currently, 91 (84%) of the 108 plants exceeding effluent guidelines have some form of remedial action. Appendix A includes a summary of plants which have remedial action in 1989. Appendix C elaborates on these remedial actions on a plant-specific basis.

The number of plants that reported remedial action is summarized in Table 14. Four plants have failed effluent guideline limits for three successive years and have not reported any remedial programs to the MOE.

TABLE 14
SUMMARY OF STPS REPORTING REMEDIAL ACTIONS

Region	Number of STPs Exceeding Guidelines	Number of STPs Reporting Remedial Actions	% of STPs Reporting Remedial Action
SW	32	29	91
WC	18	18	100
C	15	8	53
SE	22	18	82
NE	18	15	83
NW	3	3	100

10.0 **ABATEMENT OF STP OPERATIONS**

In 1989, Regions initiated a program to inspect plants for compliance with Ministry Acts, Regulations, Policies and Cs of A. All Ministry and municipally-operated STPs are inspected once per year by Regional MOE Environmental Inspectors. Detailed inspections of plant operations, maintenance procedures, process equipment and records are carried out less frequently. After an inspection, the operating authority and the Ministry abatement staff are informed of any deficiencies by way of Inspection Reports.

If significant abatement measures are required, the Abatement Section will be responsible for ensuring that these are undertaken by the Operating Authority within a specified time frame. For Ministry-operated plants, the Utility operations Section would initiate measures to abate the problem or upgrade the facility.

For minor problems, the Environmental Inspector arranges for the Operating Authority to advise the Abatement Section when the deficiencies have been corrected.

Failure of the Operating Authority to comply with Regulations, Acts or Cs of A may result in prosecution by the Ministry's Investigations and Enforcement Branch.

11.0 ENFORCEMENT

The Investigations and Enforcement Branch (IEB) are alerted to action through the Occurrence Report, when a STP fails to comply with a Control Document or reports an environmental incident eg. a spill.

The current procedure for responding to an environmental incident requires a Provincial Officer or Environmental Response Person (ERP) to make an initial response. Information obtained during this initial response is essential to the success of any investigation that follows.

Prosecution may follow for any of the following reasons: the violation poses a significant risk or adverse effect to the environment or humans; the violation is deliberate in nature or if there is a degree of negligence involved; the violation is repeated or warning is disregarded; the violator has concealed information; or, the violator has an unsatisfactory record with Ministry orders.

Guidelines themselves are not legally enforceable but may form the basis to prove an offence through expert testimony in court. The expert must provide evidence to show the violation leads to a significant impairment of the receiving water body.

Enforcement actions that took place in 1989 against STPs are summarized in Table 15.

TABLE 15
ENFORCEMENT ACTIVITIES THAT HAVE GONE TO COURT AGAINST
MUNICIPAL SEWAGE TREATMENT PLANTS

<u>MUNICIPALITY</u>	<u>OFFENCE DESCRIPTION</u>	<u>DISPOSITION</u>
Regional Municipality of Sudbury N.E. Region	Lagoon - Illegal discharge of cell contents	Went to court in 1991
District Municipality of Muskoka Central Region	Lagoon Works - Bypass at pumping station	Guilty Plea Fine -\$2500.00

12.0 HISTORICAL REVIEW

Table 16 compares the number of STPs exceeding MOE guideline limits from 1986 to 1989. Some improvement in compliance with Ministry guidelines occurred over the past 4 years.

Table 17 compares the total number of facilities exceeding monthly TP requirements from 1986 to 1989. A steady improvement in compliance with TP has been observed over the past four years; for example, 49% of the plants requiring phosphorus removal were out of compliance in 1985 but only 29% were out of compliance in 1989.

Table 18 and 19 indicate that there has been little change in compliance with BOD and SS over 4 years.

TABLE 16
NUMBER OF SEWAGE TREATMENT PLANTS
EXCEEDING MOE EFFLUENT GUIDELINE LIMITS
1986 - 1989

Year	Total Number of Facilities Assessed	Number of Facilities Exceeding Guidelines	% Facilities Exceeding Limits
1986	362	151	42
1987	371	138	37
1988	362	109	30
1989	364	108	30

TABLE 17
NUMBER OF SEWAGE TREATMENT PLANTS
EXCEEDING MONTHLY TOTAL PHOSPHORUS LIMITS
1986-1989

Year	Total Number of Facilities with Phosphorus Removal	Number of Facilities Exceeding Monthly Requirements	% Facilities Exceeding Monthly Requirements
1986	258	126	49
1987	262	100	38
1988	265	78	30
1989	265	76	29

TABLE 18
NUMBER OF SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT BOD GUIDELINE LIMITS
1985-1989

Year	Total Number of Facilities Assessed	Number of Facilities Exceeding Requirements	% Facilities Exceeding Limits
1986	362	16	4
1987	362	17	5
1988	362	15	4
1989	364	16	4

TABLE 19
NUMBER OF SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT SS GUIDELINE LIMITS
1985-1989

Year	Total Number of Facilities with Phosphorus Removal	Number of Facilities Exceeding Requirements	% Facilities Exceeding Limits
1986	362	47	13
1987	371	53	14
1988	362	47	13
1989	364	41	11

13.0 BYPASSES

This report only summarizes the bypass that occurs within the boundary of a STP. Bypass occurring outside an STP, including pumping stations located outside the plant property is considered to be a combined sewer overflow and is assessed by regional staff on a case-by-case basis.

Primary bypass is the discharge of raw sewage. Secondary bypass is the sewage that has undergone solids removal at the primary clarifiers of an STP but bypassed the biological treatment process before discharge.

Bypasses may occur for a number of reasons such as:

1. An increase in hydraulic loading due to infiltration or inflow from a storm event or spring thaw;
2. Operational problems, eg., equipment breakdown; or,
3. STP is under-sized.

Bypasses often occur during storm events or spring thaw as a way of preventing micro-organisms from being washed out from the biological treatment process in a secondary plant, or to prevent flooding of the STPs and surrounding areas. Bypasses under dry weather conditions are not allowed since they can be prevented by expanding the treatment plant or properly maintaining process equipment.

STPs are required to report the volume, duration and number of instances of bypasses. Appendix D summarizes the 1989 monthly bypass data for mechanical STPs only. Lagoons typically bypass at off-site locations which are considered as Combined Sewer Overflows.

One hundred and seventy-seven or 73% of the total number of mechanical STPs (244) reported bypass data in 1989. The number of plants reporting bypass data to the Ministry has improved. In 1988, only 54% of the mechanical STPs reported bypass data.

A number of deficiencies in the 1989 database were identified as follows:

1. Only 34 out of 177 (19%) mechanical plants submitted the complete data set which includes volume, duration and number of instances for either primary bypass or secondary bypass. This is an improvement over last year in which only 6 STPs reported complete data sets.

2. Most STPs do not have flow monitoring devices for bypasses; this results in poorly estimated volume.
3. Frequently, there are no devices to record the occurrence of a bypass. A bypass occurring when the plant is not staffed would go unnoticed. As a result, the number of instances and duration of bypasses can be higher than the data reported.
4. This year a number of interpretation problems was evident. Many plants have reported the number of days in a month as opposed to the number of times a bypass occurred in a month.

Keeping these deficiencies in mind, Table 20 should be treated as cursory information only. This table summarizes the total volume, duration, number of instances and ratio of volume of bypass to treated effluent for raw sewage bypass and secondary bypass.

**TABLE 20
ANNUAL SUMMARY OF PRIMARY AND SECONDARY BYPASSES**

	PRIMARY BYPASS				SECONDARY BYPASS			
	VOLUME (1000m ³)	DURATION (HOURS)	NO. OF TIMES	*RATIO	VOLUME (1000m ³)	DURATION (HOURS)	NO. OF TIMES	*RATIO
TOTAL	5702.79	4,070.9	3893	3.00%	2277.91	5,476.1	1772	1.0%
MAXIMUM	1246.05	1,043.0	364	60.00%	802.95	1,813.0	363	7.5%
PLANT	STAMFORD WPCP	CARLETON PLACE WPCP		STAMFORD WPCP	BELLEVILLE WPCP	BELLEVILLE WPCP		BELLEVILLE WPCP
MINIMUM	0.01	0.1	1	<0.01%	0.15	0.5	1	0.08%
PLANT	EAR FALLS WPCP	SAULT STE. MARIE-WEST END		EAR FALLS WPCP	WELLINGTON WPCP	OAKVILLE SOUTHWEST WPCP		WELLINGTON WPCP

N.B. Ratio (%) is the ratio of bypass effluent over treated effluent (expressed as a percent) at the plants reporting a bypass.

The maximum and minimum data reported are the values for bypassed effluent for a given plant on an annual basis. The plant that bypassed the maximum volume did not necessarily have the maximum duration time nor the number of occurrences.

The longest duration of secondary bypass occurred at Belleville. Belleville was designed to provide only primary treatment for flows in excess of $55 \times 10^3 \text{ m}^3$ during wet weather.

14.0 **ENQUIRIES**

Enquiries about specific STPs may be directed to the Ministry's Regional Offices or District Offices. These addresses and phone numbers are available in Appendix B at the beginning of each Regional section.

Copies of this report are available from:

Communications Branch,
Ministry of the Environment,
135 St. Clair Ave. W., 6th Floor,
Toronto, Ontario
M4V 1P5
323-4321

Enquiries concerning this report may be directed to:

Ministry of the Environment,
MISA Municipal Office,
Water Resources Branch,
1 St. Clair Ave. W., 9th Floor,
Toronto, Ontario.
M4V 1K6
323-4980

APPENDIX A

WASTEWATER TREATMENT FACILITIES
EXCEEDING EFFLUENT REQUIREMENTS
FOR 1989

EXPLANATORY NOTES FOR APPENDIX A

BOD and SS are assessed on an annual basis.

TP is assessed on a monthly basis. The value associated with the TP column is the number of months per year that the TP limit was exceeded.

**SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT REQUIREMENTS IN 1989**

REGION : SOUTHWEST

PLANT NAME	1989 EXCEEDANCES					REMEDIAL PROGRAM	ANTICIPATED COMPLIANCE
	BOD	SS	TP	1988	1987		
+AILSA CRAIG WPCP			1		*	YES	1989/09
+BELMONT LAGOON			1		*	YES	1989/05
+BLENHEIM LAGOON		33.4		*	*	YES	1990/04
+BRIGDEN P.V. LAGOON		44.3				YES	1990/04
CHESLEY LAGOON			4	*	*	YES	1989/09
+COTTAM LAGOON		75.3		*	*	YES	1990/04
+DRESDEN WPCP			1	*	*	YES	
+DUTTON LAGOON		36.7		*	*	YES	1991/12
+FOREST LAGOON		74.7		*	*	YES	1990/04
+GLENCOE LAGOON		36.9	1	*		YES	1990/04
GODERICH WPCP			1	*	*	YES	
+GRAND BEND LAGOON		36.7		*	*	YES	1990/04
+INGERSOLL NEW WPCP			8	*	*	YES	1990/01
+INGERSOLL OLD WPCP			10			YES	1990/01
+KINCARDINE LAGOON			7	*		YES	1990/01
LEAMINGTON WPCP			1			NO	
+LISTOWEL LAGOON CONT DI			3	*	*	YES	
+MERLIN PV LAGOON		93.6		*	*	YES	1990/04
+MILDMAY WPCP			1			YES	1989/11
+MITCHELL'S BAY LAGOON		100.3		*		YES	1990/04

NOTE:

+ = MOE OPERATED PLANT

* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

**SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT REQUIREMENTS IN 1989**

REGION : SOUTHWEST

PLANT NAME	1989 EXCEEDANCES					REMEDIAL PROGRAM	ANTICIPATED COMPLIANCE
	BOD	SS	TP	1988	1987		
+OIL SPRINGS LAGOON		29.4			*	YES	1990/04
+POINT EDWARD WPCP	21%	43%	11	*	*	YES	1992/01
+PORT BURWELL WPCP			1	*	*	YES	1989/07
+PORT STANLEY LAGOON			1			YES	1990/04
+RIDGETOWN LAGOON		46.4	2	*	*	YES	1990/04
+RODNEY LAGOON		31.3		*	*	YES	
SARNIA WPCP			1	*		NO	
ST THOMAS WPCP			3	*		YES	
+STONE POINT P.V. LAGOON		25.1		*	*	YES	
STRATHROY LAGOON			2		*	YES	1991/06
+WALLACEBURG WPCP			2	*		YES	1990/01
WESTERLY WPCP			1			NO	

NOTE:

+ = MOE OPERATED PLANT

* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

**SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT REQUIREMENTS IN 1989**

REGION : WEST CENTRAL

PLANT NAME	1989 EXCEEDANCES					REMEDIAL PROGRAM	ANTICIPATED COMPLIANCE
	BOD	SS	TP	1988	1987		
ANGER AVE. WPCP	33.6	28.7	2	*	*	YES	1990
+BRANTFORD WPCP			1	*	*	YES	1990/01
CRYSTAL BEACH WPCP			3	*	*	YES	
+DUNNVILLE WPCP			1			YES	1989/06
+ELMIRA WPCP (COMBINED F			3	*	*	YES	1990
ELORA WPCP			1			YES	1990/01
+FERGUS WPCP		25.9		*	*	YES	
+HESPELER WPCP		38.6	7	*	*	YES	
+JARVIS LAGOON		34.2			*	YES	1990
PORT DALHOUSIE WPCP		25.1	1			YES	
+PORT DOVER WPCP			2	*	*	YES	1993
PORT WELLER WPCP	26.3					YES	1990
+PRESTON WPCP			3			YES	
SEAWAY WPCP	26.7			*		YES	1991
+SHELBURNE WPCP			1	*		YES	1991/01
+ST. JACOBS PV WPCP			2	*	*	YES	1994
+WATERLOO WPCP			5	*	*	YES	1990
WELLAND WPCP			2		*	YES	1991

NOTE:

+ = MOE OPERATED PLANT

* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

**SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT REQUIREMENTS IN 1989**

REGION : CENTRAL

PLANT NAME	1989 EXCEEDANCES					REMEDIAL PROGRAM	ANTICIPATED COMPLIANCE
	BOD	SS	TP	1988	1987		
BALA WPCP		44%		*	*	YES	1991
BRIGHTON LAGOON			1	*	*	NO	
COBOURG WPCP NO 1			7	*	*	YES	1989/12
DUFFIN CREEK WPCP	25.1		1	*		YES	1990/01
FOX ST. WPCP			1			YES	
GEORGETOWN WPCP			1			NO	
HARMONY CREEK 1&2	26.5		1			YES	1990/01
LAKEFIELD LAGOON			1	*		NO	
LINDSAY LAGOON			3	*	*	YES	
MIDLAND WPCP			1		*	NO	
MOUNT ALBERT WPCP		26.0			*	NO	
NORTH TORONTO WPCP			2	*		YES	1989/05
PENETANGUISHENE WPCP			2	*		NO	
STAYNER LAGOON		26.3		*	*	YES	1991/08
WARKWORTH LAGOON		29		*	*	NO	

NOTE:

+ = MOE OPERATED PLANT

* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

**SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT REQUIREMENTS IN 1989**

REGION : SOUTHEAST

PLANT NAME	1989 EXCEEDANCES					REMEDIAL PROGRAM	ANTICIPATED COMPLIANCE
	BOD	SS	TP	1988	1987		
+ALFRED LAGOON	31.5					NO	
+AMHERSTVIEW LAGOON	30.5	64.6		*	*	YES	
ARNPRIOR WPCP	32%	58%	1	*	*	YES	1992
+BATAWA WPCP			2			NO	
BROCKVILLE WPCP		64%	9	*	*	YES	
+CARLETON PLACE WPCP	31.4	57.5	10	*	*	YES	1992
DEEP RIVER WPCP		42%			*	YES	
GREEN CREEK WPCP		65%	12	*	*	YES	1991
KEMPTVILLE WPCP			12	*	*	YES	1995
+MERRICKVILLE WPCP			3	*	*	YES	
MORRISBURG WPCP		40%			*	YES	
NAPANEE WPCP			3	*	*	YES	1990
+ODESSA WPCP			4	*		YES	1990
+PETAWAWA WPCP			1		*	YES	1990
+RUSSELL LAGOON		72.3		*	*	NO	
SMITHS FALLS WPCP			3	*	*	YES	1993
+ST. ISIDORE LAGOON		296.7				YES	1990
STIRLING LAGOON		43.3	1	*		YES	1990
+TWEED LAGOON			1	*		YES	1990
WATTS CREEK WPCP			1			NO	

NOTE:

+ = MOE OPERATED PLANT

* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

**SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT REQUIREMENTS IN 1989**

REGION : SOUTHEAST

PLANT NAME	1989 EXCEEDANCES					REMEDIAL PROGRAM	ANTICIPATED COMPLIANCE
	BOD	SS	TP	1988	1987		
WELLINGTON WPCP			2	*		YES	1990
+WESTPORT LAGOON			1	*	*	YES	

NOTE:

+ = MOE OPERATED PLANT

* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

**SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT REQUIREMENTS IN 1989**

REGION : NORTHEAST

PLANT NAME	1989 EXCEEDANCES					REMEDIAL PROGRAM	ANTICIPATED COMPLIANCE
	BOD	SS	TP	1988	1987		
BOB'S LAKE LAGOON	32.3			*	*	YES	1992
+CALLANDER LAGOON		32.8	1			YES	1989/09
CHELMSFORD WPCP			2			YES	1991/01
+ENGLEHART LAGOON			2	*		YES	
+ESPANOLA WPCP		48%				YES	
ESTEN LAKE WPCP	97.6					NO	
FALCONBRIDGE TOWNSITE WP	38.6	44.3		*	*	YES	1990/12
HARTY LAGOON			1			NO	
+KIRKLAND LAKE WPCP			3	*	*	YES	
+LAKE TEMISKAMING NEW WPC			1			YES	
+LAKE TEMISKAMING OLD WPC			1	*	*	YES	
+MOOSONEE WPCP (OLD TOWNS	42.3	45.7		*		YES	
+NEW LISKEARD LAGOON			5			YES	
+ST.CHARLES LAGOON			1	*		YES	
+STURGEON FALLS WPCP			4	*	*	YES	
VIRGINIATOWN AND KEARNS	21%	10%		*	*	NO	
+WAWA LAGOON	6.7	7.6	1			YES	
+WEST END WPCP			1			YES	

NOTE:

+ = MOE OPERATED PLANT

* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

**SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT REQUIREMENTS IN 1989**

REGION : NORTHWEST

PLANT NAME	1989 EXCEEDANCES					REMEDIAL PROGRAM	ANTICIPATED COMPLIANCE
	BOD	SS	TP	1988	1987		
+ATIKOKAN WPCP			2	*	*	YES	1990
SIoux LOOKOUT WPCP		30.9				YES	
THUNDER BAY WPCP		67%	8	*	*	YES	

NOTE:

+ = MOE OPERATED PLANT

* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

APPENDIX B

WASTEWATER TREATMENT FACILITIES
EXCEEDING C OF A REQUIREMENTS
FOR 1989

EXPLANATORY NOTES FOR APPENDIX B

Each STP has a site specific C of A. Monitoring frequencies indicated on the C of A may vary depending on stream sensitivity and parameter being assessed. Therefore, this appendix only highlights, by an asterisk, which parameter has been exceeded. For more detailed assessment see individual plants in Appendix C.

**SEWAGE TREATMENT PLANTS
EXCEEDING CERTIFICATE OF APPROVAL REQUIREMENTS IN 1989**

REGION : SOUTHWEST

PLANT NAME	NON-COMPLIANCE			REMEDIAL PROGRAM(S)	ANTICIPATED COMPLIANCE
	BOD	SS	TP		
+TAVISTOCK LAGOON		*		NO	

NOTE:

+ = MOE OPERATED PLANT

* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

**SEWAGE TREATMENT PLANTS
EXCEEDING CERTIFICATE OF APPROVAL REQUIREMENTS IN 1989**

REGION : WEST CENTRAL

PLANT NAME	NON-COMPLIANCE			REMEDIAL PROGRAM(S)	ANTICIPATED COMPLIANCE
	BOD	SS	TP		
PORT WELLER WPCP	*			YES	1990

NOTE:

+ = MOE OPERATED PLANT

* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

**SEWAGE TREATMENT PLANTS
EXCEEDING CERTIFICATE OF APPROVAL REQUIREMENTS IN 1989**

REGION : CENTRAL

PLANT NAME	NON-COMPLIANCE			REMEDIAL PROGRAM(S)	ANTICIPATED COMPLIANCE
	BOD	SS	TP		
ORILLIA WPCP			*	YES	

NOTE:

+ = MOE OPERATED PLANT

* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

**SEWAGE TREATMENT PLANTS
EXCEEDING CERTIFICATE OF APPROVAL REQUIREMENTS IN 1989**

REGION : SOUTHEAST

PLANT NAME	NON-COMPLIANCE			REMEDIAL PROGRAM(S)	ANTICIPATED COMPLIANCE
	BOD	SS	TP		
GREEN CREEK WPCP	*	*	*	YES	

NOTE:

+ = MOE OPERATED PLANT

* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

APPENDIX C

WASTEWATER TREATMENT FACILITIES
LISTINGS AND OPERATING DATA
FOR 1989

ABBREVIATIONS FOR APPENDIX C

AVG	.....Average
BOD	.....Biochemical Oxygen Demand
INF	.....Influent
kg/d	.....Kilograms per day
m ³	.....Cubic metres
mg/l	.....Milligrams per litre
Number Exceed	.....Number of months per year a STP has exceeded the effluent limit
P.V.	.....Police Village
SS	.....Suspended Solids
TP	.....Total Phosphorus
WPCP	.....Water Pollution Control Plant (same as STP)

1988 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CHESLEY
 PLANT : CHESLEY LAGOON MUN.OP.JAN'87
 WORKS NUMBER : 110000105
 TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.45 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : BRUCE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : NORTH SAUGEEN RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,883

Number of months per year a STP has exceeded the effluent limit.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.66	0.82	1.23	0.74	0.48	0.37	0.33	0.44	0.37	0.65	0.88	0.66	0.64	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	115.0	84.0	60.6	68.0	69.0	21.4	103.0	ND	69.0	94.0	26.0	93.0	73.0	
EFFLUENT (MG/L)	7.1	4.7	6.6	9.3	4.7	1.7	4.3	ND	4.1	3.4	2.8	1.3	30.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	4.68	3.85	8.11	6.88	2.25	0.62	1.41	ND	1.51	2.21	2.46	0.85		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	156.9	89.1	66.1	74.0	70.0	47.9	111.6	ND	114.2	88.6	22.2	122.0	87.5	
EFFLUENT (MG/L)	4.0	5.1	8.4	24.8	4.2	8.2	8.6	ND	13.7	3.8	2.7	1.4	40.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	2.64	4.18	10.33	18.35	2.01	3.03	2.83	ND	5.06	2.47	2.37	0.92		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.1	4.7	8.0	4.8	4.4	2.9	5.6	ND	4.7	6.8	2.1	5.5	4.7	
EFFLUENT (MG/L)	0.9	0.9	1.1	0.8	0.7	0.9	1.6	ND	1.8	0.6	0.4	0.5	0.9	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3
LOADING (KG/D)	0.59	0.73	1.35	0.59	0.37	0.33	0.52	ND	0.66	0.39	0.35	0.33	0.58	

An annual concentration limit

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

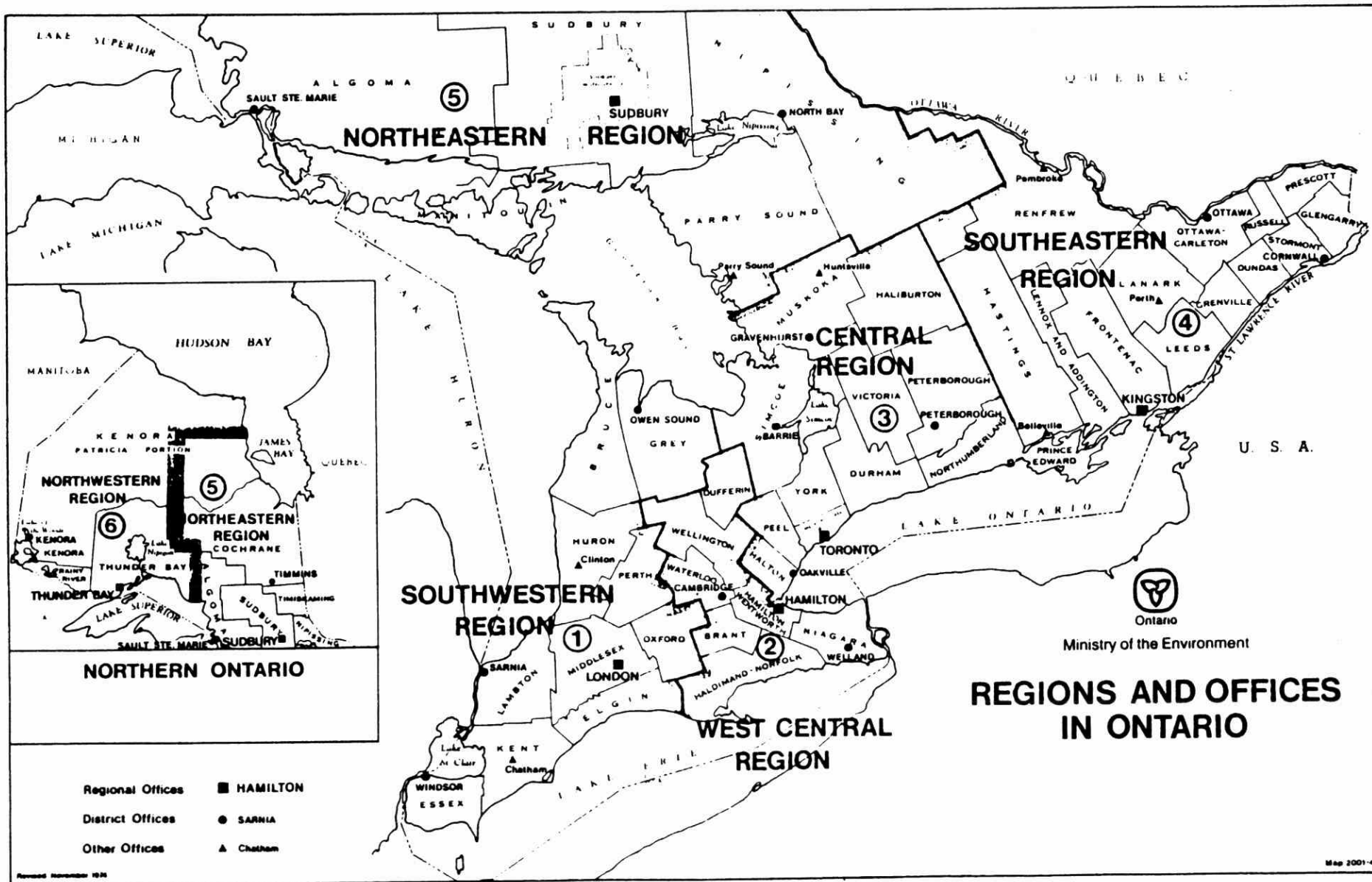
A monthly concentration limit

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

The value indicating the number of months per year a STP has exceeded the effluent limit

NO REMEDIAL MEASURES REPORTED



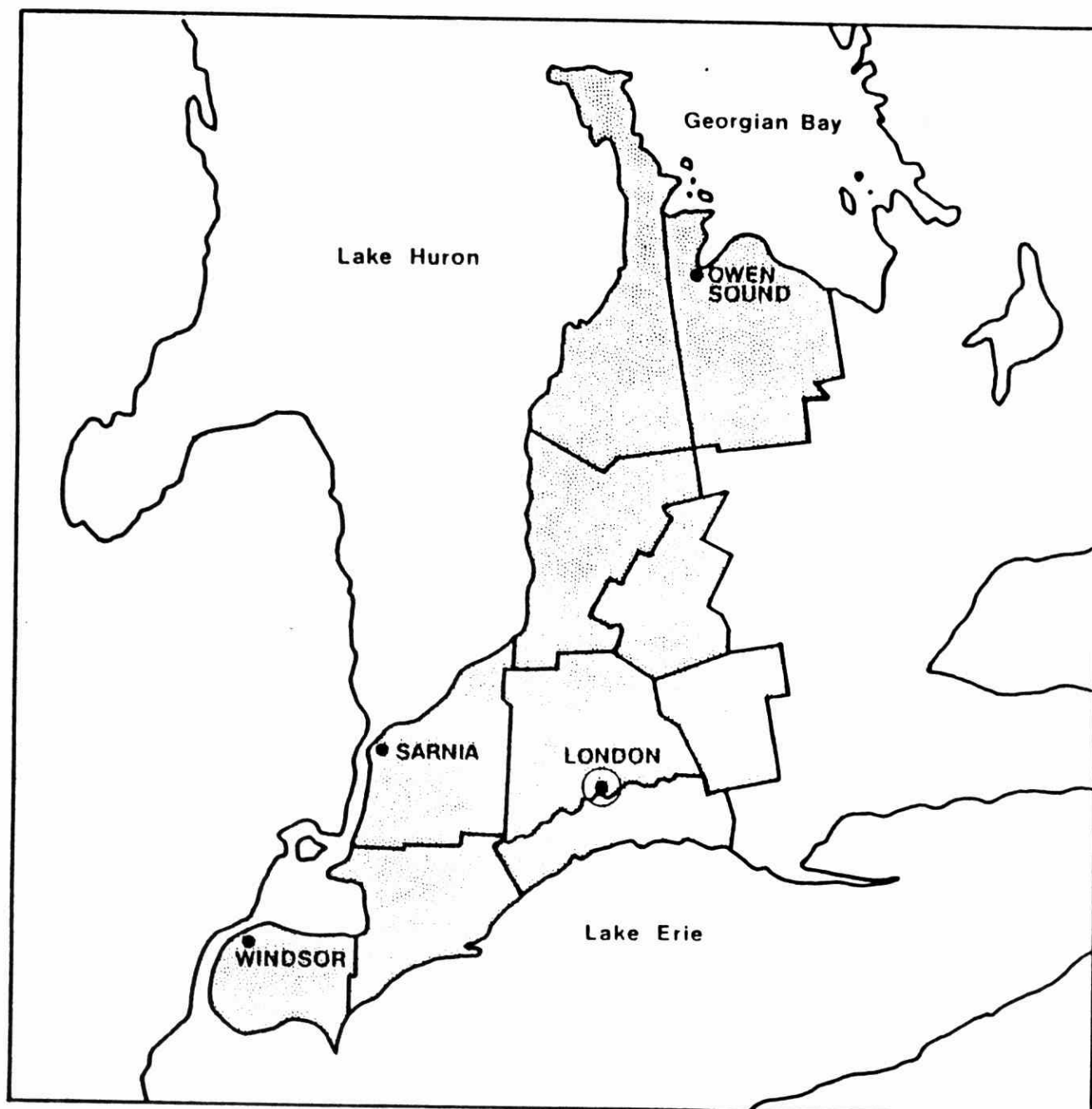
Southwestern Region

①



Ontario

Ministry
of the
Environment



Southwestern Region

①



Ministry
of the
Environment

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DISTRICT OFFICES

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435 Grand Ave. West
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Clinton
c/o Ministry of
Agriculture & Food
P.O. Box 688
NOM 1L0
(519) 482-3428

SOUTHWEST SUMMARY – 1989

Treatment Type	Number			Design Capacity (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Primary	2	3	5	27.14	237.34	264.48
Conventional Activated Sludge	8	12	20	57.09	359.41	416.50
Contact Stabilization	0	1	1	–	1.82	1.82
Extended Aeration	18	2	20	32.63	23.17	55.80
High Rate	1	0	1	3.90	–	3.90
Oxidation Ditch	2	1	3	3.75	6.45	10.20
Aerated Lagoon	2	2	4	2.94	8.58	11.52
Convent. Lagoon Continuous	2	1	3	3.61	1.46	5.07
Conventional Lagoon Seasonal	31	3	34	34.71	6.31	41.02
Lagoon and Spray	1	0	1	0.57	–	0.57
Aerated Cell Plus Lagoon	7	1	8	20.22	0.17	20.39
Conventional Lagoon Annual	5	0	5	2.15	–	2.15
TOTALS	79	26	105	188.71	644.71	833.42

1000M3/D: Thousands of cubic meters per day
ADF: Average Daily Flow

SOUTHWEST SUMMARY - 1989

Treatment Type	Number			Annual ADF (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Primary	2	3	5	15.18	159.35	174.53
Conventional Activated Sludge	8	12	20	44.61	310.14	354.75
Contact Stabilization	0	1	1	0.00	1.62	1.62
Extended Aeration	18	2	20	17.68	22.21	39.89
High Rate	1	0	1	2.89	0.00	2.89
Oxidation Ditch	2	1	3	1.49	3.97	5.46
Aerated Lagoon	2	2	4	1.21	5.02	6.23
Convent. Lagoon Continuous	2	1	3	3.79	0.79	4.58
Conventional Lagoon Seasonal	31	3	34	23.78	9.06	32.84
Lagoon and Spray	1	0	1	0.57	0.00	0.57
Aerated Cell Plus Lagoon	7	1	8	13.64	0.00	13.64
Conventional Lagoon Annual	5	0	5	1.40	0.00	1.40
TOTALS	79	26	105	126.24	512.16	638.40

1000M3/D: Thousands of cubic meters per day
ADF: Average Daily Flow

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ALVINSTON
 PLANT : ALVINSTON WPCP
 WORKS NUMBER : 110002069
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.60 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : LAMBTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : SYDENHAM RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 690

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.25	0.19	0.20	0.25	0.18	0.19	0.16	0.15	0.18	0.16	0.18	0.24	0.19	
<u>BOD5</u>														
INFLUENT (MG/L)	90.0	116.0	129.0	90.0	163.0	152.0	141.0	158.0	184.0	142.0	118.0	123.0	133.8	
EFFLUENT (MG/L)	3.0	4.9	4.1	4.7	5.4	3.3	1.7	3.4	2.7	0.1	3.6	4.8	3.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.75	0.93	0.82	1.17	0.97	0.62	0.27	0.51	0.48	0.01	0.64	1.15	0.67	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	105.0	123.0	121.0	72.0	175.0	162.0	129.0	161.0	207.0	152.0	109.0	74.0	132.5	
EFFLUENT (MG/L)	8.5	8.2	9.7	4.2	3.4	5.0	4.6	3.1	5.2	5.4	4.1	4.4	5.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.12	1.55	1.94	1.05	0.61	0.95	0.73	0.46	0.93	0.86	0.73	1.05	1.05	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	5.6	10.2	6.8	6.8	6.8	6.8	8.8	7.1	9.1	6.8	7.2	6.5	7.4	
EFFLUENT (MG/L)	0.3	0.8	0.5	0.2	0.2	0.3	0.5	0.6	0.3	0.3	0.4	0.4	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.07	0.15	0.10	0.05	0.03	0.05	0.08	0.09	0.05	0.04	0.07	0.09	0.08	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : AMHERSTBURG
 PLANT : AMHERSTBURG WPCP
 WORKS NUMBER : 120001087
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 7.76 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ESSEX
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : DETROIT RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 8,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	6.43	5.43	6.06	7.60	5.83	6.45	ND	6.20	7.22	5.66	5.83	5.44	6.20	
<u>BOD5</u>														
INFLUENT (MG/L)	59.0	167.0	167.0	39.0	55.0	ND	31.0	20.0	23.0	91.0	101.0	ND	75.3	
EFFLUENT (MG/L)	7.0	12.2	12.2	12.8	17.9	ND	27.2	ND	11.3	8.6	18.0	ND	14.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	45.01	66.24	73.93	97.28	104.35	ND	ND	ND	81.58	48.67	104.94	ND	87.42	
LOADING LIMIT (KG/D)														
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	176.0	96.0	161.0	169.0	89.0	88.0	121.0	131.0	129.0	128.0	133.0	136.0	129.8	
EFFLUENT (MG/L)	28.6	28.2	28.1	27.0	22.7	28.9	26.8	28.8	28.9	28.8	29.0	29.0	27.9	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	183.89	153.12	170.28	205.20	132.34	186.40	ND	178.56	208.65	163.00	169.07	157.76	172.98	
LOADING LIMIT (KG/D)														
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	4.5	4.2	2.3	2.4	3.3	4.3	2.5	3.2	3.5	3.7	3.5	3.6	3.4	
EFFLUENT (MG/L)	1.0	1.0	0.9	0.9	0.9	0.8	1.0	1.0	1.0	1.0	1.0	0.9	1.0	
CONCENTRATION LIMIT (MG/L)													1.0	
LOADING (KG/D)	6.43	5.43	5.45	6.84	5.24	5.16	ND	6.20	7.22	5.66	5.83	4.89	6.20	
LOADING LIMIT (KG/D)														

SUMMARY

PARAM	CRITERIA	LOADING	COMPLIES WITH CONC	LOADING
BOD	NA	NA	NA	NA
SS	30.0 MG/L	NA	YES	NA
TP	1.0 MG/L	NA	YES	NA

NOTE:

BOD - HAS NO CRITERIA
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : AMHERSTBURG
 PLANT : AMHERSTBURG WPCP
 WORKS NUMBER : 120001087
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 7.76 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ESSEX
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : DETROIT RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 8,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	6.43	5.43	6.06	7.60	5.83	6.45	ND	6.20	7.22	5.66	5.83	5.44	6.20	
<u>BOD5</u>														
INFLUENT (MG/L)	59.0	167.0	167.0	39.0	55.0	ND	31.0	20.0	23.0	91.0	101.0	ND	75.3	
EFFLUENT (MG/L)	7.0	12.2	12.2	12.8	17.9	ND	27.2	ND	11.3	8.6	18.0	ND	14.1	
LOADING (KG/D)	45.01	66.24	73.93	97.28	104.35	ND	ND	ND	81.58	48.67	104.94	ND	87.42	
PERCENT REMOVAL	88	93	93	67	67		12		51	91	82		81	
PERCENT REMOVAL LIMITS													50	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	176.0	96.0	161.0	169.0	89.0	88.0	121.0	131.0	129.0	128.0	133.0	136.0	129.8	
EFFLUENT (MG/L)	28.6	28.2	28.1	27.0	22.7	28.9	26.8	28.8	28.9	28.8	29.0	29.0	27.9	
LOADING (KG/D)	183.89	153.12	170.28	205.20	132.34	186.40	ND	178.56	208.65	163.00	169.07	157.76	172.98	
PERCENT REMOVAL	84	71	83	84	74	67	78	78	78	78	78	79	79	
PERCENT REMOVAL LIMITS													70	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	4.5	4.2	2.3	2.4	3.3	4.3	2.5	3.2	3.5	3.7	3.5	3.6	3.4	
EFFLUENT (MG/L)	1.0	1.0	0.9	0.9	0.9	0.8	1.0	1.0	1.0	1.0	1.0	0.9	1.0	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	6.43	5.43	5.45	6.84	5.24	5.16	ND	6.20	7.22	5.66	5.83	4.89	6.20	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ANDERDON
 PLANT : EDGEWATER BEACH LAGOON
 WORKS NUMBER : 110002407
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.61 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ESSEX
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : DETROIT RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,869

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.56	0.49	0.56	0.88	0.54	0.83	0.73	0.59	0.58	0.50	0.52	0.50	0.61	
LAGOON DISCHARGE	ND	ND	ND	11.82	91.57	44.32	ND	ND	ND	ND	108.42	14.31	54.09	
BOD5														
INFLUENT (MG/L)	166.0	124.0	116.0	53.0	155.0	70.0	90.0	146.0	97.0	128.0	134.0	174.0	121.1	
EFFLUENT (MG/L)	ND	ND	ND	2.5	4.1	4.4	ND	ND	ND	ND	4.2	16.5	6.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	2.20	2.21	3.65	ND	ND	ND	ND	2.18	8.25	3.84	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	90.0	89.0	133.0	42.0	119.0	63.0	74.0	106.0	78.0	74.0	64.0	88.0	85.0	
EFFLUENT (MG/L)	ND	ND	ND	4.8	4.9	6.4	ND	ND	ND	ND	7.9	22.3	9.3	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	4.22	2.64	5.31	ND	ND	ND	ND	4.10	11.15	5.67	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.3	7.8	7.2	2.6	10.5	5.1	6.7	7.3	5.9	6.7	7.3	7.7	6.9	
EFFLUENT (MG/L)	ND	ND	ND	0.1	0.2	0.5	ND	ND	ND	ND	0.3	0.6	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.08	0.10	0.41	ND	ND	ND	ND	0.15	0.30	0.18	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ANDERDON
 PLANT : MCGREGOR LAGOON
 WORKS NUMBER : 110002096
 TREATMENT : LAGOON AND SPRAY
 : NO DISCHARGE
 :
 DESIGN CAPACITY : 0.56 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ESSEX
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : NO DISC TO SURFACE WATER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,734

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.55	0.48	0.52	0.60	0.57	0.67	0.79	0.50	0.56	0.52	0.61	0.49	0.57	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	13.60	117.34	ND	ND	ND	ND	65.47	
BOD5														
INFLUENT (MG/L)	116.0	130.0	159.0	84.0	162.0	87.0	115.0	136.0	130.0	104.0	159.0	163.0	128.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	8.0	5.0	ND	ND	ND	ND	6.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	6.32	2.50	ND	ND	ND	ND	3.71	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	120.0	128.0	164.0	88.0	129.0	120.0	83.0	128.0	122.0	122.0	97.0	117.0	118.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	18.2	12.1	ND	ND	ND	ND	15.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	14.37	6.05	ND	ND	ND	ND	8.66	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.5	8.3	9.0	4.7	6.0	6.6	6.8	6.7	6.7	5.6	6.9	8.5	6.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	0.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	0.23	0.15	ND	ND	ND	ND	0.17	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:

BOD - HAS NO CRITERIA
 SS - HAS NO CRITERIA
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ARRAN
 PLANT : TARA LAGOON
 WORKS NUMBER : 110003237
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.65 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : BRUCE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : SAUBLE RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 637

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.25	0.22	0.33	0.23	0.20	0.21	0.20	0.19	0.20	0.21	0.23	0.23	0.23	
LAGOON DISCHARGE	ND	ND	ND	56.09	ND	ND	ND	ND	ND	ND	21.72	ND	38.91	
BOD5														
INFLUENT (MG/L)	137.0	158.0	137.0	132.0	180.0	194.0	188.0	134.0	262.0	121.0	130.0	172.0	162.1	
EFFLUENT (MG/L)	ND	ND	ND	9.5	ND	ND	ND	ND	ND	ND	2.0	ND	5.8	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	2.18	ND	ND	ND	ND	ND	ND	0.46	ND	1.33	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	187.0	226.0	110.0	208.0	150.0	269.0	124.0	101.0	367.0	101.0	83.0	118.0	170.3	
EFFLUENT (MG/L)	ND	ND	ND	32.8	ND	ND	ND	ND	ND	ND	8.2	ND	20.5	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	7.54	ND	ND	ND	ND	ND	ND	1.88	ND	4.72	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.9	8.0	7.0	10.2	8.2	8.9	8.0	6.3	13.0	7.5	5.9	6.2	8.2	
EFFLUENT (MG/L)	ND	ND	ND	0.8	ND	ND	ND	ND	ND	ND	0.6	ND	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.18	ND	ND	ND	ND	ND	ND	0.13	ND	0.16	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : AYLMER
 PLANT : AYLMER LAGOON
 WORKS NUMBER : 110000891
 TREATMENT : AERATED CELL PLUS LAGOON
 : SUMMER STORAGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 DESIGN CAPACITY : 5.23 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ELGIN
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : CATFISH CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 5,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.65	3.18	3.35	4.44	3.53	3.47	2.60	2.50	2.58	2.65	3.52	2.77	3.19	
LAGOON DISCHARGE	ND	ND	168.68	ND	199.59	ND	ND	ND	ND	ND	541.81	ND	303.36	
BOD5														
INFLUENT (MG/L)	122.0	105.0	143.0	150.0	173.0	137.0	252.0	105.0	199.0	213.0	191.0	248.0	169.8	
EFFLUENT (MG/L)	ND	ND	18.4	ND	2.7	ND	ND	ND	ND	ND	1.5	ND	7.5	
CONCENTRATION LIMIT (MG/L)	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0		
LOADING (KG/D)	ND	ND	61.64	ND	9.53	ND	ND	ND	ND	ND	5.28	ND	23.93	
LOADING LIMIT (KG/D)														
SUSPENDED SOLIDS														
INFLUENT (MG/L)	125.0	81.0	87.0	156.0	86.0	75.0	101.0	80.0	100.0	70.0	75.0	88.0	93.7	
EFFLUENT (MG/L)	ND	ND	9.3	ND	4.0	ND	ND	ND	ND	ND	2.2	ND	5.2	
CONCENTRATION LIMIT (MG/L)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0		
LOADING (KG/D)	ND	ND	31.15	ND	14.12	ND	ND	ND	ND	ND	7.74	ND	16.59	
LOADING LIMIT (KG/D)														
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.3	10.7	13.9	6.3	7.0	7.6	9.5	9.5	16.0	20.2	13.0	10.9	11.0	
EFFLUENT (MG/L)	ND	ND	0.8	ND	0.4	ND	ND	ND	ND	ND	0.4	ND	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	2.68	ND	1.41	ND	ND	ND	ND	ND	1.40	ND	1.60	
LOADING LIMIT (KG/D)														

SUMMARY

PARAM	CRITERIA	LOADING	COMPLIES WITH	
			CONC	LOADING
BOD	25.0 MG/L	NA	YES	NA
SS	30.0 MG/L	NA	YES	NA
TP	1.0 MG/L	NA	YES	NA

NOTE:

BOD - ASSESSED MONTHLY
 SS - ASSESSED MONTHLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : AYLMER
 PLANT : AYLMER LAGOON
 WORKS NUMBER : 110000891
 TREATMENT : AERATED CELL PLUS LAGOON
 : SUMMER STORAGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 DESIGN CAPACITY : 5.23 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ELGIN
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : CATFISH CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 5,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.65	3.18	3.35	4.44	3.53	3.47	2.60	2.50	2.58	2.65	3.52	2.77	3.19	
LAGOON DISCHARGE	ND	ND	168.68	ND	199.59	ND	ND	ND	ND	ND	541.81	ND	303.36	
BOD5														
INFLUENT (MG/L)	122.0	105.0	143.0	150.0	173.0	137.0	252.0	105.0	199.0	213.0	191.0	248.0	169.8	
EFFLUENT (MG/L)	ND	ND	18.4	ND	2.7	ND	ND	ND	ND	ND	1.5	ND	7.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	61.64	ND	9.53	ND	ND	ND	ND	ND	5.28	ND	23.93	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	125.0	81.0	87.0	156.0	86.0	75.0	101.0	80.0	100.0	70.0	75.0	88.0	93.7	
EFFLUENT (MG/L)	ND	ND	9.3	ND	4.0	ND	ND	ND	ND	ND	2.2	ND	5.2	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	31.15	ND	14.12	ND	ND	ND	ND	ND	7.74	ND	16.59	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.3	10.7	13.9	6.3	7.0	7.6	9.5	9.5	16.0	20.2	13.0	10.9	11.0	
EFFLUENT (MG/L)	ND	ND	0.8	ND	0.4	ND	ND	ND	ND	ND	0.4	ND	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	ND	ND	2.68	ND	1.41	ND	ND	ND	ND	ND	1.40	ND	1.60	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BELMONT
 PLANT : BELMONT LAGOON
 WORKS NUMBER : 110002032
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.56 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ELGIN
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : KETTLE CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,150

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.41	0.36	0.42	0.54	0.39	0.44	0.40	0.37	0.41	0.37	0.48	0.39	0.42	
LAGOON DISCHARGE	ND	ND	ND	64.80	ND	ND	ND	ND	ND	52.00	62.76	ND	59.85	
BOD5														
INFLUENT (MG/L)	81.0	79.0	113.0	84.0	128.0	109.0	118.0	102.0	119.0	132.0	80.0	114.0	104.9	
EFFLUENT (MG/L)	ND	ND	ND	13.2	ND	ND	ND	ND	ND	3.0	3.5	ND	6.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	7.12	ND	ND	ND	ND	ND	1.11	1.68	ND	2.77	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	87.0	112.0	116.0	58.0	83.0	123.0	97.0	94.0	105.0	125.0	72.0	238.0	109.2	
EFFLUENT (MG/L)	ND	ND	ND	12.5	ND	ND	ND	ND	ND	6.2	9.0	ND	9.2	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	6.75	ND	ND	ND	ND	ND	2.29	4.32	ND	3.86	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.2	6.5	7.6	4.8	6.7	7.4	6.2	5.5	6.8	8.5	5.0	606.0	56.4	
EFFLUENT (MG/L)	ND	ND	ND	1.3*	ND	ND	ND	ND	ND	0.6	0.1	ND	0.7	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.70	ND	ND	ND	ND	ND	0.22	0.04	ND	0.29	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED
 OPERATIONAL/PROCESS - CONDUCTING TREATABILITY STUDIES

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989/05	1989/10	1989/05
1989/10	1990/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BLANDFORD-BLENHEIM
 PLANT : PLATTSVILLE LAGOON
 WORKS NUMBER : 110003022
 TREATMENT : AERATED CELL PLUS LAGOON
 : SEASONAL DISCHARGE
 : PHOSPHORUS REMOVAL - BATCH
 DESIGN CAPACITY : 0.59 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : OXFORD
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : NITH RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 795

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.42	0.45	0.46	0.42	0.34	0.42	0.36	0.42	0.33	0.37	0.40	0.38	0.40	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	274.0	90.0	ND	130.0	ND	86.0	266.0	254.0	161.0	164.0	123.0	188.0	173.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	18.2	ND	ND	ND	ND	ND	1.4	ND	9.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	6.18	ND	ND	ND	ND	ND	0.56	ND	3.92	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	300.0	101.0	ND	227.0	ND	115.0	474.0	162.0	191.0	159.0	113.0	146.0	198.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	26.6	ND	ND	ND	ND	ND	6.8	ND	16.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	9.04	ND	ND	ND	ND	ND	2.72	ND	6.68	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.7	4.2	ND	5.1	ND	3.5	15.4	4.0	5.3	6.3	5.4	6.4	6.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.6	ND	ND	ND	ND	ND	0.1	ND	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.20	ND	ND	ND	ND	ND	0.04	ND	0.16	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988/02	1990/01	
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BLENHEIM
 PLANT : BLENHEIM LAGOON
 WORKS NUMBER : 120001666
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 1.95 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : KENT
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : CAMERON DR - MCGREGOR CK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,200

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.56	1.39	1.55	1.65	2.10	1.84	1.57	1.82	1.52	1.30	1.29	1.19	1.57	
LAGOON DISCHARGE	ND	ND	ND	255.59	ND	ND	ND	ND	ND	ND	354.40	ND	305.00	
BOD5														
INFLUENT (MG/L)	146.0	139.0	124.0	148.0	134.0	148.0	172.0	159.0	572.0	144.0	170.0	160.0	184.7	
EFFLUENT (MG/L)	ND	ND	ND	19.3	ND	ND	ND	ND	ND	ND	25.1	ND	22.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	31.84	ND	ND	ND	ND	ND	ND	32.37	ND	34.85	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	244.0	208.0	102.0	114.0	91.0	144.0	170.0	135.0	443.0	143.0	154.0	113.0	171.8	
EFFLUENT (MG/L)	ND	ND	ND	27.2	ND	ND	ND	ND	ND	ND	39.6	ND	33.4*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	44.88	ND	ND	ND	ND	ND	ND	51.08	ND	52.44	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	8.3	7.4	8.2	7.0	7.6	6.7	7.7	10.0	7.6	8.4	8.2	7.8	
EFFLUENT (MG/L)	ND	ND	ND	0.6	ND	ND	ND	ND	ND	ND	0.6	ND	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.99	ND	ND	ND	ND	ND	ND	0.77	ND	0.94	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988/02	1990/01	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BLYTH
 PLANT : BLYTH WPCP
 WORKS NUMBER : 110002247
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 0.73 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : HURON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BLYTH CREEK
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 890

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.42	0.40	0.42	0.42	0.37	0.28	0.29	0.30	0.27	0.29	0.34	0.33	0.34	
BOD5														
INFLUENT (MG/L)	94.0	152.0	187.0	77.0	128.0	117.0	166.0	112.0	158.0	121.0	108.0	120.0	128.3	
EFFLUENT (MG/L)	1.1	3.7	1.9	2.3	2.6	2.3	2.2	1.3	1.2	1.8	6.0	2.1	2.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.46	1.48	0.79	0.96	0.96	0.64	0.63	0.39	0.32	0.52	2.04	0.69	0.82	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	153.0	180.0	306.0	70.0	124.0	98.0	255.0	215.0	191.0	130.0	91.0	192.0	167.1	
EFFLUENT (MG/L)	0.6	5.2	2.1	3.9	1.5	1.8	2.5	1.7	2.2	1.2	2.6	4.9	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.25	2.08	0.88	1.63	0.55	0.50	0.72	0.51	0.59	0.34	0.88	1.61	0.85	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.7	8.6	9.2	5.8	7.1	6.4	9.5	8.1	14.0	7.1	5.6	9.5	8.1	
EFFLUENT (MG/L)	0.2	0.7	0.2	0.4	0.2	0.2	0.3	0.2	0.4	0.2	0.3	0.3	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.08	0.28	0.08	0.16	0.07	0.05	0.08	0.06	0.10	0.05	0.10	0.09	0.10	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BRUSSELS
 PLANT : BRUSSELS WPCP
 WORKS NUMBER : 110002354
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 0.88 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : HURON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MAITLAND RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,010

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.32	0.37	0.45	0.46	0.35	0.48	0.32	0.31	0.30	0.32	0.40	0.37	0.37	
BOD5														
INFLUENT (MG/L)	93.0	174.0	159.0	277.0	169.0	121.0	51.0	48.0	128.0	137.0	189.0	261.0	150.6	
EFFLUENT (MG/L)	2.5	3.1	3.4	3.4	3.8	2.0	3.3	1.5	1.9	1.9	3.0	1.8	2.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.80	1.14	1.53	1.56	1.33	0.96	1.05	0.46	0.57	0.60	1.20	0.66	0.96	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	150.0	246.0	237.0	403.0	243.0	132.0	168.0	218.0	108.0	268.0	253.0	250.0	223.0	
EFFLUENT (MG/L)	1.3	1.9	2.8	2.1	1.8	1.2	2.2	2.8	1.9	1.7	2.6	4.6	2.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.41	0.70	1.26	0.96	0.63	0.57	0.70	0.86	0.57	0.54	1.04	1.70	0.81	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.9	12.6	9.7	18.3	11.2	8.5	9.6	10.4	8.6	11.3	10.8	12.5	10.9	
EFFLUENT (MG/L)	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.3	0.2	0.2	0.1	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.03	0.07	0.09	0.09	0.07	0.04	0.06	0.09	0.09	0.06	0.08	0.03	0.07	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CHATHAM
 PLANT : CHATHAM WPCP
 WORKS NUMBER : 110000098
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 35.91 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : KENT
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : THAMES RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 41,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	21.12	22.35	25.45	31.40	31.09	30.41	24.53	26.13	26.74	27.12	27.29	22.16	26.32	
<u>BOD5</u>														
INFLUENT (MG/L)	127.0	171.0	178.0	187.0	161.0	131.0	136.0	137.0	155.0	145.0	180.0	195.0	158.6	
EFFLUENT (MG/L)	4.3	7.1	10.2	6.9	5.7	3.4	7.1	6.9	6.5	5.1	10.5	6.5	6.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	90.81	158.68	259.59	216.66	177.21	103.39	174.16	180.29	173.81	138.31	286.54	144.04	176.34	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	210.0	189.0	193.0	196.0	223.0	150.0	174.0	213.0	358.0	216.0	192.0	251.0	213.8	
EFFLUENT (MG/L)	9.1	12.6	23.7	14.8	13.2	13.2	20.5	26.2	26.8	25.1	22.1	12.7	18.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	192.19	281.61	603.16	464.72	410.38	401.41	502.86	684.60	716.63	680.71	603.10	281.43	481.66	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	13.3	17.1	13.8	11.1	11.7	10.4	11.8	8.8	9.6	8.1	12.6	10.3	11.6	
EFFLUENT (MG/L)	0.8	0.9	0.6	0.5	0.4	0.4	0.5	0.5	0.4	0.5	0.3	0.5	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	16.89	20.11	15.27	15.70	12.43	12.16	12.26	13.06	10.69	13.56	8.18	11.08	13.16	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CHESLEY
 PLANT : CHESLEY LAGOON
 WORKS NUMBER : 110000105
 TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.45 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : BRUCE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : NORTH SAUGEEN RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,883

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.67	0.48	1.17	0.76	0.85	0.82	0.66	0.63	0.76	0.72	1.10	0.86	0.79	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	96.0	122.0	144.0	90.0	93.0	78.0	118.0	67.0	113.0	73.0	49.0	85.0	94.0	
EFFLUENT (MG/L)	6.4	4.7	11.5	23.6	21.6	2.8	1.8	0.1	3.0	2.2	2.2	5.1	7.1	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	4.28	2.25	13.45	17.93	18.36	2.29	1.18	0.06	2.28	1.58	2.42	4.38	5.61	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	145.0	165.0	45.0	82.0	104.0	174.0	209.0	82.0	104.0	97.0	58.0	267.0	127.7	
EFFLUENT (MG/L)	6.6	9.0	7.2	7.6	22.6	2.9	32.3	2.3	2.6	2.0	3.8	3.1	8.5	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	4.42	4.32	8.42	5.77	19.21	2.37	21.31	1.44	1.97	1.44	4.18	2.66	6.72	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.1	7.4	2.5	5.2	4.4	5.0	7.1	4.7	8.5	5.4	2.4	4.5	5.3	
EFFLUENT (MG/L)	1.1*	1.5*	1.8*	1.0	0.9	1.6*	1.0	0.5	0.8	0.6	0.4	0.3	1.0	4
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.73	0.72	2.10	0.76	0.76	1.31	0.66	0.31	0.60	0.43	0.44	0.25	0.79	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED

START DATE END DATE ANTICIPATED
 COMPLIANCE

1989/09

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CLEARWATER TOWN
 PLANT : BRIGHT'S GROVE LAGOON
 WORKS NUMBER : 110001989
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 DESIGN CAPACITY : 1.75 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : LAMBTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : CREEK TO L.HURON
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,150

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.21	1.09	1.24	1.21	1.30	1.20	1.17	1.13	1.27	1.25	1.30	1.21	1.22	
LAGOON DISCHARGE	ND	ND	ND	ND	128.70	ND	ND	ND	ND	ND	ND	ND	128.70	
BOD5														
INFLUENT (MG/L)	208.0	179.0	285.0	292.0	91.0	146.0	103.0	141.0	388.0	133.0	176.0	225.0	197.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	8.3	ND	ND	ND	ND	2.8	ND	ND	5.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	10.79	ND	ND	ND	ND	3.50	ND	ND	6.83	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	590.0	194.0	1,885.0	1,208.0	80.0	232.0	103.0	124.0	94.0	101.0	110.0	71.0	399.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	15.6	ND	ND	ND	ND	30.0	ND	ND	22.8	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	20.28	ND	ND	ND	ND	37.50	ND	ND	27.82	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	14.5	8.0	25.0	15.6	6.7	8.9	7.4	8.0	9.7	7.8	8.0	10.7	10.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	2.3	ND	ND	ND	ND	4.5	ND	ND	3.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	2.99	ND	ND	ND	ND	5.62	ND	ND	4.15	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988/02	1990/01	
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CLINTON
 PLANT : CLINTON WPCP
 WORKS NUMBER : 120000925
 TREATMENT : CONTACT STABILIZATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT FILTRATION
 DESIGN CAPACITY : 1.81 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : HURON
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : BAYFIELD RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.20	1.76	2.00	2.65	1.69	1.50	0.99	1.00	1.04	1.21	1.80	1.60	1.62	
BOD5														
INFLUENT (MG/L)	79.0	84.0	78.0	60.0	106.0	143.0	141.0	127.0	125.0	137.0	93.0	111.0	107.0	
EFFLUENT (MG/L)	7.0	4.0	5.6	6.8	4.7	1.5	5.4	0.7	2.3	0.9	3.1	2.6	3.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	15.40	7.04	11.20	18.02	7.94	2.25	5.34	0.70	2.39	1.08	5.58	4.16	5.99	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	85.0	101.0	80.0	46.0	93.0	219.0	118.0	146.0	130.0	187.0	82.0	71.0	113.2	
EFFLUENT (MG/L)	5.0	3.5	3.8	9.6	6.1	3.2	3.5	0.3	3.2	2.0	2.6	2.1	3.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	11.00	6.16	7.60	25.44	10.30	4.80	3.46	0.30	3.32	2.42	4.68	3.36	5.99	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.8	5.0	4.2	2.7	3.9	6.1	6.9	6.2	6.9	6.9	5.1	4.6	5.2	
EFFLUENT (MG/L)	0.6	0.5	0.6	0.6	0.7	0.6	0.6	0.8	0.5	0.3	0.4	0.4	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.32	0.88	1.20	1.59	1.18	0.90	0.59	0.80	0.52	0.36	0.72	0.64	0.97	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COLCHESTER SOUTH
 PLANT : COLCHESTER SOUTH TWP (0P APRIL 89)
 WORKS NUMBER : 110002595
 TREATMENT : AERATED LAGOON
 : CONTINUOUS DISCHARGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 DESIGN CAPACITY : 1.81 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ESSEX
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE ERIE
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,058

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	1.16	0.91	0.90	0.71	0.62	0.45	0.79	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	36.05	28.31	26.97	21.87	18.55	13.98	24.29	
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	14.0	43.0	5.0	100.0	94.0	76.0	55.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	0.1	1.2	1.2	1.0	1.4	2.0	1.2	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	0.11	1.09	1.08	0.71	0.86	0.90	0.95	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	32.0	167.0	4.0	73.0	207.0	75.0	93.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	3.7	0.6	2.0	2.6	1.5	2.8	2.2	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	4.29	0.54	1.80	1.84	0.93	1.26	1.74	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	1.3	2.1	0.4	2.7	4.7	3.5	2.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND				0.1		0.1		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND				0.07		0.04		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	INSUFFICIENT DATA
SS	40.0 MG/L	INSUFFICIENT DATA
TP	1.0 MG/L	INSUFFICIENT DATA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : COLLINGWOOD TWP
 PLANT : CRAIGLEIGH WPCP
 WORKS NUMBER : 120001951
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT FILTRATION
 DESIGN CAPACITY : 4.07 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : GREY
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : GEORGIAN BAY
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.01	0.91	1.13	0.82	0.84	1.00	1.00	1.03	0.80	0.81	0.90	1.06	0.94	
BOD5														
INFLUENT (MG/L)	19.0	58.0	44.0	65.0	18.0	48.0	24.0	ND	11.0	206.0	16.0	16.0	47.7	
EFFLUENT (MG/L)	1.0	0.7	1.9	1.2	2.0	1.4	0.7	ND	1.6	1.1	1.2	1.1	1.3	
CONCENTRATION LIMIT (MG/L)													15.0	
LOADING (KG/D)	1.01	0.63	2.14	0.98	1.68	1.40	0.70	ND	1.28	0.89	1.08	1.16	1.22	
LOADING LIMIT (KG/D)													61.20	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	65.0	71.0	59.0	46.0	65.0	42.0	64.0	105.0	43.0	124.0	65.0	146.0	74.6	
EFFLUENT (MG/L)	2.2	4.3	1.9	0.5	1.8	0.5	1.3	3.3	2.5	0.6	0.8	1.0	1.7	
CONCENTRATION LIMIT (MG/L)													15.0	
LOADING (KG/D)	2.22	3.91	2.14	0.41	1.51	0.50	1.30	3.39	2.00	0.48	0.72	1.06	1.60	
LOADING LIMIT (KG/D)													61.20	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.0	2.9	2.3	1.7	1.6	2.3	2.1	2.6	2.8	4.6	1.8	3.1	2.5	
EFFLUENT (MG/L)	0.3	0.3	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.3	
CONCENTRATION LIMIT (MG/L)													0.3	
LOADING (KG/D)	0.30	0.27	0.11	0.16	0.16	0.20	0.30	0.30	0.24	0.24	0.18	0.31	0.28	
LOADING LIMIT (KG/D)													1.22	

SUMMARY

PARAM	CRITERIA	LOADING	COMPLIES WITH	
			CONC	LOADING
BOD	15.0 MG/L	61.20 KG/D	YES	YES
SS	15.0 MG/L	61.20 KG/D	YES	YES
TP	0.3 MG/L	1.22 KG/D	YES	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COLLINGWOOD TWP
 PLANT : CRAIGLEIGH WPCP
 WORKS NUMBER : 120001951
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT FILTRATION
 DESIGN CAPACITY : 4.07 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : GREY
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : GEORGIAN BAY
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.01	0.91	1.13	0.82	0.84	1.00	1.00	1.03	0.80	0.81	0.90	1.06	0.94	
BOD5														
INFLUENT (MG/L)	19.0	58.0	44.0	65.0	18.0	48.0	24.0	ND	11.0	206.0	16.0	16.0	47.7	
EFFLUENT (MG/L)	1.0	0.7	1.9	1.2	2.0	1.4	0.7	ND	1.6	1.1	1.2	1.1	1.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.01	0.63	2.14	0.98	1.68	1.40	0.70	ND	1.28	0.89	1.08	1.16	1.22	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	65.0	71.0	59.0	46.0	65.0	42.0	64.0	105.0	43.0	124.0	65.0	146.0	74.6	
EFFLUENT (MG/L)	2.2	4.3	1.9	0.5	1.8	0.5	1.3	3.3	2.5	0.6	0.8	1.0	1.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.22	3.91	2.14	0.41	1.51	0.50	1.30	3.39	2.00	0.48	0.72	1.06	1.60	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.0	2.9	2.3	1.7	1.6	2.3	2.1	2.6	2.8	4.6	1.8	3.1	2.5	
EFFLUENT (MG/L)	0.3	0.3	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.30	0.27	0.11	0.16	0.16	0.20	0.30	0.30	0.24	0.24	0.18	0.31	0.28	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DOVER
 PLANT : MITCHELL'S BAY LAGOON
 WORKS NUMBER : 110002087
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.50 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : KENT
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE ST. CLAIR
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 378

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.10	0.10	0.10	0.14	0.14	0.20	0.18	0.15	0.15	0.14	0.41	0.11	0.16	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.19	ND	ND	6.19	
BOD5														
INFLUENT (MG/L)	205.0	94.0	160.0	59.0	110.0	59.0	96.0	65.0	ND	14.0	84.0	ND	94.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.0	ND	ND	4.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56	ND	ND	0.64	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	168.0	85.0	193.0	89.0	86.0	80.0	130.0	144.0	ND	59.0	65.0	ND	109.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	100.3	ND	ND	100.3*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	14.04	ND	ND	16.05	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.5	6.2	11.3	ND	4.1	5.8	6.8	2.8	ND	0.9	3.5	ND	5.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2	ND	ND	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02	ND	ND	0.03	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988/02	1990/01	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DRESDEN
 PLANT : DRESDEN WPCP
 WORKS NUMBER : 110002014
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 4.54 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : KENT
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : SYDENHAM RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,568

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.64	1.73	1.46	1.55	1.40	1.66	1.41	1.55	2.02	1.56	1.92	2.16	1.67	
BOD5														
INFLUENT (MG/L)	147.0	162.0	90.0	152.0	122.0	69.0	116.0	57.0	35.0	69.0	153.0	64.0	103.0	
EFFLUENT (MG/L)	5.1	8.5	10.2	9.2	15.6	14.1	3.6	23.2	11.7	6.0	9.2	7.8	10.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8.36	14.70	14.89	14.26	21.84	23.40	5.07	35.96	23.63	9.36	17.66	16.84	17.37	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	287.0	111.0	188.0	261.0	337.0	315.0	136.0	125.0	42.0	350.0	144.0	136.0	202.7	
EFFLUENT (MG/L)	17.0	13.3	21.1	21.1	19.8	20.7	12.7	26.8	13.4	19.2	17.4	12.3	17.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	27.88	23.00	30.80	32.70	27.72	34.36	17.90	41.54	27.06	29.95	33.40	26.56	29.89	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.6	2.9	1.1	1.5	4.4	2.9	2.9	3.0	2.8	7.7	3.4	2.8	3.3	
EFFLUENT (MG/L)	0.3	0.3	0.2	0.2	0.3	0.4	0.3	0.6	0.8	0.6	1.2*	0.2	0.5	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.49	0.51	0.29	0.31	0.42	0.66	0.42	0.93	1.61	0.93	2.30	0.43	0.84	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - ENFORCING SEWER-USE BYLAWS
 SLUDGE DISPOSAL/REMOVAL - UPGRADING WASTE DISPOSAL SITE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988		
1988		

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DUNDALK
 PLANT : DUNDALK LAGOON
 WORKS NUMBER : 110001471
 TREATMENT : AERATED CELL PLUS LAGOON
 : SUMMER STORAGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 DESIGN CAPACITY : 1.05 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : GREY
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : FOLEY DRAIN TO GRAND R.
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,400

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.92	0.79	1.26	1.35	0.97	0.98	0.65	0.62	0.63	0.73	1.07	0.80	0.90	
LAGOON DISCHARGE	80.02	29.21	37.20	57.68	ND	ND	ND	ND	ND	ND	9.76	61.88	45.96	
BOD5														
INFLUENT (MG/L)	74.0	163.0	138.0	44.0	40.0	39.0	40.0	48.0	56.0	68.0	73.0	75.0	71.5	
EFFLUENT (MG/L)	2.2	4.0	11.2	16.5	ND	ND	ND	ND	ND	ND	2.2	2.0	6.4	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	2.02	3.16	14.11	22.27	ND	ND	ND	ND	ND	ND	2.35	1.60	5.76	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	91.0	189.0	218.0	47.0	31.0	52.0	47.0	108.0	140.0	147.0	153.0	112.0	111.3	
EFFLUENT (MG/L)	6.9	8.7	15.8	25.2	ND	ND	ND	ND	ND	ND	9.3	4.5	11.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	6.34	6.87	19.90	34.02	ND	ND	ND	ND	ND	ND	9.95	3.60	10.53	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.5	8.5	10.9	3.1	2.7	3.8	2.9	4.3	4.6	4.9	4.8	7.4	5.1	
EFFLUENT (MG/L)	0.4	0.2	0.7	0.6	ND	ND	ND	ND	ND	ND	0.3	0.7	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.36	0.15	0.88	0.81	ND	ND	ND	ND	ND	ND	0.32	0.56	0.45	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DURHAM
 PLANT : DURHAM MUN WPCP
 WORKS NUMBER : 110000999
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 2.18 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : GREY
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : SAUGEEN RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,332

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.93	0.87	0.99	1.15	0.99	0.96	0.83	0.80	0.79	0.83	0.79	1.00	0.91	
BOD5														
INFLUENT (MG/L)	161.0	153.0	194.0	192.0	195.0	193.0	227.0	154.0	ND	218.0	132.0	135.0	177.6	
EFFLUENT (MG/L)	4.4	3.2	3.8	4.0	0.9	2.3	1.6	1.3	ND	0.9	ND	2.6	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.09	2.78	3.76	4.60	0.89	2.20	1.32	1.04	ND	0.74	ND	2.60	2.28	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	532.0	514.0	595.0	773.0	501.0	1,025.0	812.0	450.0	ND	710.0	536.0	408.0	623.3	
EFFLUENT (MG/L)	16.4	22.7	13.2	11.6	7.4	7.4	5.0	4.2	ND	7.9	ND	11.8	10.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	15.25	19.74	13.06	13.34	7.32	7.10	4.15	3.36	ND	6.55	ND	11.80	9.83	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	10.7	8.3	9.9	11.8	9.4	10.5	11.2	7.1	ND	13.6	10.6	6.7	10.0	
EFFLUENT (MG/L)	0.5	0.7	0.3	0.4	0.1	0.2	0.2	0.2	ND	0.3	ND	0.5	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.46	0.60	0.29	0.46	0.09	0.19	0.16	0.16	ND	0.24	ND	0.50	0.27	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DUTTON
 PLANT : DUTTON LAGOON
 WORKS NUMBER : 110001266
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.31 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ELGIN
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BENNETT CK. TO L. ERIE
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 977

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.36	0.38	0.40	0.43	0.46	0.47	0.59	0.46	0.46	0.46	0.47	0.47	0.45	
LAGOON DISCHARGE	ND	ND	ND	42.41	ND	ND	ND	ND	ND	46.30	ND	ND	44.36	
BOD5														
INFLUENT (MG/L)	200.0	148.0	131.0	183.0	82.0	145.0	222.0	301.0	164.0	193.0	34.0	ND	163.9	
EFFLUENT (MG/L)	ND	ND	ND	15.5	ND	ND	ND	ND	ND	10.1	ND	ND	12.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	6.66	ND	ND	ND	ND	ND	4.64	ND	ND	5.76	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	135.0	131.0	107.0	116.0	41.0	168.0	140.0	136.0	181.0	334.0	24.0	ND	137.5	
EFFLUENT (MG/L)	ND	ND	ND	34.1	ND	ND	ND	ND	ND	39.2	ND	ND	36.7*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	14.66	ND	ND	ND	ND	ND	18.03	ND	ND	16.52	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.6	7.6	9.2	7.2	4.8	7.9	9.6	7.9	9.7	8.6	2.6	ND	7.6	
EFFLUENT (MG/L)	ND	ND	ND	0.7	ND	ND	ND	ND	ND	0.5	ND	ND	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.30	ND	ND	ND	ND	ND	0.23	ND	ND	0.27	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988	1991/12	1991/12

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : EAST WILLIAMS
 PLANT : AILSA CRAIG WPCP
 WORKS NUMBER : 110002050
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.60 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : MIDDLESEC
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : AUSABLE RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 897

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.45	0.42	0.42	0.46	0.36	0.33	0.25	0.26	0.27	0.28	0.33	0.32	0.35	
BOD5														
INFLUENT (MG/L)	126.0	144.0	142.0	127.0	129.0	140.0	114.0	123.0	175.0	141.0	117.0	106.0	132.0	
EFFLUENT (MG/L)	4.6	3.4	5.8	7.1	2.0	3.0	2.0	2.4	2.4	2.4	4.5	1.8	3.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.07	1.42	2.43	3.26	0.72	0.99	0.50	0.62	0.64	0.67	1.48	0.57	1.23	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	196.0	220.0	158.0	121.0	151.0	190.0	137.0	136.0	227.0	138.0	89.0	167.0	160.8	
EFFLUENT (MG/L)	9.3	9.6	12.4	6.4	8.3	13.4	7.3	10.3	9.5	10.3	15.6	1.2	9.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.18	4.03	5.20	2.94	2.98	4.42	1.82	2.67	2.56	2.88	5.14	0.38	3.33	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.4	8.1	6.4	6.2	14.1	8.6	6.3	6.4	8.9	7.5	6.1	8.3	7.9	
EFFLUENT (MG/L)	0.4	0.4	0.6	0.5	0.4	0.6	1.0	1.4*	0.8	0.7	0.7	0.7	0.7	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.18	0.16	0.25	0.23	0.14	0.19	0.25	0.36	0.21	0.19	0.23	0.22	0.25	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988/07

1989/09

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : EAST ZORRA-TAVISTOCK
 PLANT : TAVISTOCK LAGOON
 WORKS NUMBER : 110000720
 TREATMENT : AERATED CELL PLUS LAGOON
 : SEASONAL DISCHARGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 DESIGN CAPACITY : 0.77 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : OXFORD
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : TRIBUTARY TO THAMES R.
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,952

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.02	0.91	0.96	1.14	0.91	1.13	0.83	0.81	0.76	0.85	0.94	0.90	0.93	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23.80	23.80	
<u>BOD5</u>														
INFLUENT (MG/L)	ND	ND	233.0	156.0	188.0	206.0	398.0	378.0	259.0	327.0	330.0	160.0	263.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	4.8	
CONCENTRATION LIMIT (MG/L)	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.32	4.46	
LOADING LIMIT (KG/D)														
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	ND	ND	105.0	82.0	126.0	187.0	227.0	172.0	155.0	203.0	196.0	106.0	155.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	34.5*	34.5	I
CONCENTRATION LIMIT (MG/L)	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	31.05	32.09	
LOADING LIMIT (KG/D)														
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	ND	ND	8.0	6.3	12.1	16.5	29.9	27.0	18.9	12.5	19.8	11.9	16.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18	0.19	
LOADING LIMIT (KG/D)														

SUMMARY

PARAM	CRITERIA	LOADING	COMPLIES WITH	
			CONC	LOADING
BOD	25.0 MG/L	NA	YES	NA
SS	25.0 MG/L	NA	NO	NA
TP	1.0 MG/L	NA	YES	NA

NOTE:

BOD - ASSESSED MONTHLY
 SS - ASSESSED MONTHLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : EAST ZORRA-TAVISTOCK
 PLANT : TAVISTOCK LAGOON
 WORKS NUMBER : 110000720
 TREATMENT : AERATED CELL PLUS LAGOON
 : SEASONAL DISCHARGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 DESIGN CAPACITY : 0.77 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : OXFORD
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : TRIBUTARY TO THAMES R.
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,952

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.02	0.91	0.96	1.14	0.91	1.13	0.83	0.81	0.76	0.85	0.94	0.90	0.93	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23.80	23.80	
<u>BOD5</u>														
INFLUENT (MG/L)	ND	ND	233.0	156.0	188.0	206.0	398.0	378.0	259.0	327.0	330.0	160.0	263.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	4.8	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.32	4.46	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	ND	ND	105.0	82.0	126.0	187.0	227.0	172.0	155.0	203.0	196.0	106.0	155.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	34.5*	34.5	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	31.05	32.09	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	ND	ND	8.0	6.3	12.1	16.5	29.9	27.0	18.9	12.5	19.8	11.9	16.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18	0.19	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ENNISKILLEN
 PLANT : OIL CITY LAGOON
 WORKS NUMBER : 110001738
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.18 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : LAMBTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BLACK CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 170

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.06	0.05	0.05	0.07	0.05	0.06	0.05	0.05	0.06	0.06	0.07	0.06	0.06	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	93.0	107.0	46.0	94.0	130.0	132.0	125.0	162.0	129.0	137.0	118.0	74.0	112.3	
EFFLUENT (MG/L)	ND	ND	ND	4.0	ND	ND	ND	ND	ND	ND	ND	ND	4.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	0.28	ND	ND	ND	ND	ND	ND	ND	ND	0.24	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	70.0	89.0	43.0	53.0	75.0	83.0	76.0	84.0	61.0	110.0	63.0	37.0	70.3	
EFFLUENT (MG/L)	ND	ND	ND	5.5	ND	ND	ND	ND	ND	ND	ND	ND	5.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	0.38	ND	ND	ND	ND	ND	ND	ND	ND	0.33	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.3	9.6	4.9	5.8	7.9	8.8	8.7	7.9	7.9	7.2	6.7	4.8	7.2	
EFFLUENT (MG/L)	ND	ND	ND	0.1	ND	ND	ND	ND	ND	ND	ND	ND	0.1	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	0.01	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988/02	1990/01	
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ESSEX
 PLANT : ESSEX LAGOON N.E.
 WORKS NUMBER : 110000203
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 2.88 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ESSEX
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : PUCE RIVER DRAIN
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,850

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.34	1.17	1.32	1.51	1.34	1.60	1.53	1.20	1.42	1.34	1.39	1.32	1.37	
LAGOON DISCHARGE	ND	ND	ND	261.14	ND	ND	ND	ND	ND	ND	289.45	ND	275.30	
<u>BOD5</u>														
INFLUENT (MG/L)	31.0	25.0	78.0	20.0	44.0	39.0	43.0	112.0	85.0	63.0	ND	50.0	53.6	
EFFLUENT (MG/L)	ND	ND	ND	10.9	ND	ND	ND	ND	ND	ND	8.5	ND	9.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	16.45	ND	ND	ND	ND	ND	ND	11.81	ND	13.29	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	69.0	41.0	102.0	74.0	48.0	51.0	114.0	71.0	148.0	63.0	ND	46.0	75.2	
EFFLUENT (MG/L)	ND	ND	ND	23.8	ND	ND	ND	ND	ND	ND	19.2	ND	21.5	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	35.93	ND	ND	ND	ND	ND	ND	26.68	ND	29.46	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	2.1	1.7	4.1	1.4	2.2	1.6	3.0	4.2	6.5	2.7	ND	3.4	3.0	
EFFLUENT (MG/L)	ND	ND	ND	0.3	ND	ND	ND	ND	ND	ND	0.4	ND	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.45	ND	ND	ND	ND	ND	ND	0.55	ND	0.55	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ESSEX
 PLANT : ESSEX LAGOON S.W.
 WORKS NUMBER : 110000837
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.52 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ESSEX
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : CANARD RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,401

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.94	0.89	0.94	1.11	1.07	1.85	2.02	0.98	1.05	0.85	1.01	0.79	1.13	
LAGOON DISCHARGE	ND	ND	ND	116.76	ND	ND	ND	ND	ND	ND	74.86	ND	95.81	
BOD5														
INFLUENT (MG/L)	115.0	166.0	155.0	141.0	306.0	135.0	269.0	150.0	157.0	180.0	ND	168.0	176.5	
EFFLUENT (MG/L)	ND	ND	ND	18.8	ND	ND	ND	ND	ND	ND	10.0	ND	14.4	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	20.86	ND	ND	ND	ND	ND	ND	10.10	ND	16.27	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	111.0	169.0	154.0	125.0	235.0	269.0	344.0	101.0	200.0	187.0	ND	449.0	213.1	
EFFLUENT (MG/L)	ND	ND	ND	37.2	ND	ND	ND	ND	ND	ND	20.3	ND	28.8	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	41.29	ND	ND	ND	ND	ND	ND	20.50	ND	32.54	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.0	8.9	8.6	7.3	8.0	6.9	8.5	6.6	8.0	6.4	ND	6.7	7.5	
EFFLUENT (MG/L)	ND	ND	ND	0.4	ND	ND	ND	ND	ND	ND	0.3	ND	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.44	ND	ND	ND	ND	ND	ND	0.30	ND	0.45	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : EXETER
 PLANT : EXETER LAGOON
 WORKS NUMBER : 110000221
 TREATMENT : AERATED LAGOON
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : SUMMER STORAGE
 DESIGN CAPACITY : 3.39 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : HURON
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : AUSABLE RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,750

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.59	1.87	2.81	2.86	1.99	1.93	2.40	3.23	3.58	1.64	2.69	1.61	2.43	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	117.0	139.0	84.0	82.0	138.0	67.6	51.0	35.0	96.0	97.0	145.0	288.0	111.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	ND	5.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.33	ND	13.85	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	201.0	185.0	111.0	76.0	151.0	47.6	51.0	63.0	119.0	121.0	85.0	ND	110.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	1.1	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.95	ND	2.67	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.8	5.7	5.4	4.0	6.1	4.0	3.6	3.6	5.1	3.2	4.5	14.2	5.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9	ND	0.9	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.42	ND	2.19	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : FOREST
 PLANT : FOREST LAGOON
 WORKS NUMBER : 110001346
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 :
 DESIGN CAPACITY : 1.36 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : LAMBTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : HICKORY CREEK
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,530

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.22	1.17	1.27	1.26	1.23	1.18	1.13	1.09	1.10	1.11	1.20	1.10	1.17	
LAGOON DISCHARGE	ND	ND	ND	ND	156.00	ND	ND	ND	ND	88.26	ND	ND	122.13	
BOD5														
INFLUENT (MG/L)	208.0	139.0	114.0	115.0	324.0	110.0	262.0	118.0	25.0	208.0	764.0	366.0	229.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	15.3	ND	ND	ND	ND	13.6	ND	ND	14.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	18.81	ND	ND	ND	ND	15.09	ND	ND	16.97	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	341.0	178.0	168.0	197.0	508.0	125.0	341.0	366.0	982.0	231.0	534.0	454.0	368.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	24.5	ND	ND	ND	ND	124.9	ND	ND	74.7*	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	30.13	ND	ND	ND	ND	138.63	ND	ND	87.40	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	10.9	5.1	5.9	4.3	11.7	6.2	9.3	4.8	8.7	6.6	12.2	8.4	7.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.5	ND	ND	ND	ND	1.0	ND	ND	0.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.61	ND	ND	ND	ND	1.11	ND	ND	0.94	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	NO
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988/01	1990/01	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GLENCOE
 PLANT : GLENCOE LAGOON
 WORKS NUMBER : 110001845
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.94 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : MIDDLESEC
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : NEWBIGGEN CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.76	0.56	0.65	0.89	0.67	0.88	0.53	0.61	0.72	0.67	0.81	0.64	0.70	
LAGOON DISCHARGE	ND	ND	ND	20.25	ND	ND	ND	ND	ND	27.00	ND	ND	23.63	
BOD5														
INFLUENT (MG/L)	133.0	144.0	147.0	119.0	164.0	117.0	138.0	153.0	137.0	134.0	151.0	150.0	140.6	
EFFLUENT (MG/L)	ND	ND	ND	9.9	27.8	ND	ND	ND	ND	14.1	ND	ND	17.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	8.81	18.62	ND	ND	ND	ND	9.44	ND	ND	12.11	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	102.0	125.0	114.0	338.0	111.0	126.0	98.0	133.0	106.0	103.0	84.0	62.0	125.2	
EFFLUENT (MG/L)	ND	ND	ND	36.1	58.8	ND	ND	ND	ND	15.8	ND	ND	36.9*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	32.12	39.39	ND	ND	ND	ND	10.58	ND	ND	25.83	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.1	7.9	6.7	6.0	6.4	6.4	6.4	4.8	7.4	7.0	6.4	7.5	6.8	
EFFLUENT (MG/L)	ND	ND	ND	0.6	1.4*	ND	ND	ND	ND	0.9	ND	ND	1.0	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.53	0.93	ND	ND	ND	ND	0.60	ND	ND	0.70	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988/02	1990/01	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GODERICH
 PLANT : GODERICH WPCP
 WORKS NUMBER : 120000943
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 9.09 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : HURON
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE HURON
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 7,400

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	7.70	6.10	6.80	8.00	7.00	7.20	6.70	7.70	6.60	7.20	8.10	6.70	7.15	
BOD5														
INFLUENT (MG/L)	242.0	132.0	177.0	146.0	243.0	143.0	140.0	149.0	102.0	184.0	177.0	145.0	165.0	
EFFLUENT (MG/L)	4.5	5.1	5.2	6.3	4.7	5.8	2.9	2.6	3.5	9.3	5.3	5.2	5.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	34.65	31.11	35.36	50.40	32.90	41.76	19.43	20.02	23.10	66.96	42.93	34.84	35.75	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	532.0	369.0	554.0	387.0	328.0	314.0	144.0	369.0	306.0	241.0	260.0	294.0	341.5	
EFFLUENT (MG/L)	5.5	7.4	18.9	19.1	11.4	7.8	7.6	8.9	7.2	14.8	16.5	15.7	11.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	42.35	45.14	128.52	152.80	79.80	56.16	50.92	68.53	47.52	106.56	133.65	105.19	83.66	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.6	11.9	7.0	6.0	8.1	6.2	4.8	6.3	6.7	6.4	6.1	8.0	7.1	
EFFLUENT (MG/L)	0.5	0.7	1.2*	0.9	0.6	0.4	0.3	0.4	0.4	0.9	0.7	0.6	0.6	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	3.85	4.27	8.16	7.20	4.20	2.88	2.01	3.08	2.64	6.48	5.67	4.02	4.29	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED
 OPERATIONAL/PROCESS - PROCESS CONTROL BEING UPGRADED

START DATE END DATE ANTICIPATED
 COMPLIANCE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GOSFIELD NORTH
 PLANT : COTTAM LAGOON
 WORKS NUMBER : 110002005
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.67 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ESSEX
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MADDOX DRAIN TO BELLE R.
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 978

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.33	0.30	0.31	0.36	0.31	0.36	0.42	0.30	0.33	0.30	0.32	0.31	0.33	
LAGOON DISCHARGE	ND	ND	ND	64.86	ND	ND	ND	ND	ND	ND	41.19	ND	53.03	
BOD5														
INFLUENT (MG/L)	93.0	89.0	129.0	78.0	110.0	90.0	62.0	146.0	104.0	256.0	ND	150.0	118.8	
EFFLUENT (MG/L)	ND	ND	ND	17.7	ND	ND	ND	ND	ND	ND	15.1	ND	16.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	6.37	ND	ND	ND	ND	ND	ND	4.83	ND	5.41	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	84.0	94.0	132.0	76.0	88.0	141.0	68.0	101.0	93.0	82.0	ND	135.0	99.5	
EFFLUENT (MG/L)	ND	ND	ND	40.3	ND	ND	ND	ND	ND	ND	110.3	ND	75.3*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	14.50	ND	ND	ND	ND	ND	ND	35.29	ND	24.85	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	9.7	7.0	8.7	5.2	5.9	7.5	5.6	4.6	6.9	5.9	ND	8.2	6.8	
EFFLUENT (MG/L)	ND	ND	ND	0.6	ND	ND	ND	ND	ND	ND	0.8	ND	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.21	ND	ND	ND	ND	ND	ND	0.25	ND	0.23	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988/02	1990/01	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HANOVER
 PLANT : HANOVER WPCP
 WORKS NUMBER : 120001461
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 6.36 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : GREY
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : SAUGEEN RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 6,389

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.88	3.88	5.08	4.47	4.02	4.13	3.32	3.56	3.36	3.59	4.52	4.00	3.98	
BOD5														
INFLUENT (MG/L)	202.0	254.0	168.0	186.0	165.0	197.0	92.0	262.0	222.0	340.0	329.0	179.0	216.3	
EFFLUENT (MG/L)	ND	7.7	7.7	7.5	7.0	2.0	1.1	1.9	2.6	2.7	4.5	2.9	4.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	29.87	39.11	33.52	28.14	8.26	3.65	6.76	8.73	9.69	20.34	11.60	17.11	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	393.0	186.0	173.0	100.0	132.0	217.0	116.0	225.0	157.0	284.0	515.0	92.0	215.8	
EFFLUENT (MG/L)	ND	6.8	10.6	5.6	8.6	4.6	4.1	5.9	5.5	3.3	7.0	10.7	6.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	26.38	53.84	25.03	34.57	18.99	13.61	21.00	18.48	11.84	31.64	42.80	26.27	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	14.6	7.8	6.9	4.8	6.4	9.0	5.2	6.7	7.9	7.8	19.2	5.8	8.5	
EFFLUENT (MG/L)	0.3	0.5	0.4	0.3	0.6	0.6	0.4	0.7	0.7	0.4	0.5	0.5	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.16	1.94	2.03	1.34	2.41	2.47	1.32	2.49	2.35	1.43	2.26	2.00	1.99	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HARROW
 PLANT : HARROW LAGOON
 WORKS NUMBER : 110002103
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 1.52 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ESSEX
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : CEDAR CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,415

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.31	1.19	1.23	1.37	1.42	1.72	2.42	1.25	1.32	1.17	1.35	1.40	1.43	
LAGOON DISCHARGE	ND	ND	ND	ND	174.92	ND	104.40	89.85	ND	ND	154.79	ND	130.99	
BOD5														
INFLUENT (MG/L)	89.0	132.0	152.0	87.0	212.0	108.0	112.0	92.0	121.0	56.0	162.0	144.0	122.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	12.1	ND	2.6	10.6	ND	ND	11.5	ND	9.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	17.18	ND	6.29	13.25	ND	ND	15.52	ND	13.16	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	87.0	208.0	206.0	87.0	552.0	126.0	120.0	96.0	144.0	63.0	70.0	409.0	180.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	15.4	ND	11.1	23.2	ND	ND	29.4	ND	19.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	21.86	ND	26.86	29.00	ND	ND	39.69	ND	28.31	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.4	7.3	7.8	4.5	8.8	4.8	6.4	4.4	6.9	3.7	6.3	6.2	6.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.3	ND	0.5	0.8	ND	ND	0.6	ND	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	ND	ND	ND	ND	0.42	ND	1.21	1.00	ND	ND	0.81	ND	0.86	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988/01 1990/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HENSALL
 PLANT : HENSALL LAGOON
 WORKS NUMBER : 110000926
 TREATMENT : CONVENTIONAL LAGOON ANNUAL
 :
 :
 DESIGN CAPACITY : 0.59 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : HURON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BLACK CK TO AUSABLE R.
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,155

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.57	0.53	0.63	0.63	0.58	0.61	0.57	0.65	0.58	0.60	0.61	0.57	0.59	
LAGOON DISCHARGE	ND	ND	ND	119.95	61.17	ND	ND	ND	ND	40.96	ND	ND	74.03	
BOD5														
INFLUENT (MG/L)	120.0	252.0	96.0	125.0	ND	70.0	71.0	116.0	153.0	140.0	142.0	241.0	138.7	
EFFLUENT (MG/L)	ND	ND	ND	8.2	2.0	ND	ND	ND	ND	2.3	ND	ND	4.2	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	5.16	1.16	ND	ND	ND	ND	1.38	ND	ND	2.48	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	170.0	536.0	197.0	197.0	ND	122.0	98.0	111.0	278.0	176.0	183.0	198.0	206.0	
EFFLUENT (MG/L)	ND	ND	ND	18.3	4.3	ND	ND	ND	ND	3.9	ND	ND	8.8	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	11.52	2.49	ND	ND	ND	ND	2.34	ND	ND	5.19	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.6	9.8	5.7	6.7	ND	5.8	6.2	6.1	8.6	6.8	6.8	7.7	7.0	
EFFLUENT (MG/L)	ND	ND	ND	1.4	0.1	ND	ND	ND	ND	0.8	ND	ND	0.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	0.88	0.05	ND	ND	ND	ND	0.48	ND	ND	0.47	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

ANTICIPATED

<u>START DATE</u>	<u>END DATE</u>	<u>COMPLIANCE</u>
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1988/02	1990/01	
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : INGERSOLL
 PLANT : INGERSOLL NEW WPCP
 WORKS NUMBER : 110003969
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 6.81 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : OXFORD
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : THAMES RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 5,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.99	4.16	4.55	5.54	4.76	4.82	4.50	4.74	4.37	5.30	5.66	4.92	4.78	
BOD5														
INFLUENT (MG/L)	69.0	128.0	146.0	145.0	150.0	124.0	144.0	194.0	157.0	215.0	139.0	147.0	146.5	
EFFLUENT (MG/L)	5.6	12.4	9.0	34.1	9.9	7.5	4.1	4.6	2.7	9.8	19.3	17.8	11.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	22.34	51.58	40.95	188.91	47.12	36.15	18.45	21.80	11.79	51.94	109.23	87.57	54.49	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	134.0	139.0	290.0	133.0	128.0	93.0	169.0	210.0	168.0	235.0	161.0	135.0	166.3	
EFFLUENT (MG/L)	8.0	24.2	9.2	30.9	9.9	7.8	6.6	5.4	3.6	9.7	11.7	8.7	11.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	31.92	100.67	41.86	171.18	47.12	37.59	29.70	25.59	15.73	51.41	66.22	42.80	54.01	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.7	6.6	11.9	8.4	5.2	6.2	4.7	6.3	6.0	7.9	6.9	6.9	6.8	
EFFLUENT (MG/L)	0.3	1.2*	0.5	2.5*	1.1*	0.8	1.4*	2.7*	1.3*	1.9*	0.8	1.7*	1.4	8
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.19	4.99	2.27	13.85	5.23	3.85	6.30	12.79	5.68	10.07	4.52	8.36	6.69	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

INFLUENT SEWAGE - ENFORCING SEWER USE BYLAW
 SLUDGE DISPOSAL/REMOVAL - UPGRADING SLUDGE THICKENING FACILITIES

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988/04		1990/01
1988	1990/12	1990/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : INGERSOLL
 PLANT : INGERSOLL OLD WPCP
 WORKS NUMBER : 110003978
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 3.41 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : OXFORD
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : THAMES RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.33	1.23	1.35	1.15	1.17	1.79	1.67	1.78	1.65	1.03	1.08	1.82	1.42	
<u>BOD5</u>														
INFLUENT (MG/L)	69.0	128.0	146.0	145.0	150.0	124.0	144.0	194.0	157.0	215.0	139.0	147.0	146.5	
EFFLUENT (MG/L)	8.2	15.9	10.5	7.8	32.9	6.9	3.0	4.4	4.7	3.7	3.2	11.6	9.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.90	19.55	14.17	8.97	38.49	12.35	5.01	7.83	7.75	3.81	3.45	21.11	13.35	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	134.0	139.0	290.0	133.0	128.0	93.0	169.0	210.0	168.0	235.0	161.0	135.0	166.3	
EFFLUENT (MG/L)	14.9	14.6	17.5	12.6	33.5	9.1	16.0	7.4	10.3	9.7	5.6	10.3	13.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	19.81	17.95	23.62	14.49	39.19	16.28	26.72	13.17	16.99	9.99	6.04	18.74	19.17	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	4.7	6.6	11.9	8.4	5.2	6.2	4.7	6.3	6.0	7.9	6.9	6.9	6.8	
EFFLUENT (MG/L)	0.5	1.2*	1.0	2.0*	2.4*	1.1*	1.4*	2.3*	1.4*	2.6*	1.2*	1.1*	1.5	10
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.66	1.47	1.35	2.30	2.80	1.96	2.33	4.09	2.31	2.67	1.29	2.00	2.13	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

INFLUENT SEWAGE - ENFORCING SEWER USE BYLAW
 SLUDGE DISPOSAL/REMOVAL - UPGRADING SLUDGE THICKENING FACILITIES

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988/04		1990/01
1988	1990/12	1990/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KINCARDINE
 PLANT : KINCARDINE LAGOON
 WORKS NUMBER : 110000864
 TREATMENT : AERATED CELL PLUS LAGOON
 : CONTINUOUS DISCHARGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 DESIGN CAPACITY : 5.91 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : BRUCE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE HURON
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 7,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.48	2.12	2.64	2.73	2.38	2.32	2.04	2.08	1.89	1.89	2.34	2.10	2.25	
LAGOON DISCHARGE	77.00	59.48	81.83	81.88	73.73	69.55	63.32	64.34	42.59	54.77	70.32	65.01	66.99	
BOD5														
INFLUENT (MG/L)	94.0	79.0	57.0	59.0	83.0	89.0	120.0	122.0	182.0	114.0	85.0	118.0	100.2	
EFFLUENT (MG/L)	5.9	6.4	12.1	16.4	10.5	3.0	4.0	8.6	4.9	1.3	1.6	4.2	6.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	14.63	13.56	31.94	44.77	24.99	6.96	8.16	17.88	9.26	2.45	3.74	8.82	14.85	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	121.0	103.0	42.0	45.0	70.0	66.0	134.0	123.0	144.0	132.0	96.0	79.0	96.3	
EFFLUENT (MG/L)	3.3	4.1	8.6	15.5	11.0	2.7	4.6	9.1	9.0	2.8	3.7	4.9	6.6	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	8.18	8.69	22.70	42.31	26.18	6.26	9.38	18.92	17.01	5.29	8.65	10.29	14.85	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.7	5.6	3.9	4.0	5.1	4.6	6.7	6.4	11.7	7.7	5.6	7.9	6.3	
EFFLUENT (MG/L)	1.1*	1.1*	0.8	0.6	1.2*	3.0*	2.3*	3.1*	3.5*	1.0	0.8	0.7	1.6	7
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	2.72	2.33	2.11	1.63	2.85	6.96	4.69	6.44	6.61	1.89	1.87	1.47	3.60	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING EVALUATED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989/01	1990/12	1990/01

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : KINGSVILLE
 PLANT : KINGSVILLE LAGOON
 WORKS NUMBER : 120001078
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 2.75 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ESSEX
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : WIGLE CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 5,200

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.09	2.91	3.13	3.75	3.72	5.35	4.48	4.07	4.06	3.27	3.56	2.51	3.74	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
<u>BOD5</u>														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LOADING LIMIT (KG/D)														
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LOADING LIMIT (KG/D)														
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LOADING LIMIT (KG/D)														

SUMMARY

PARAM	CRITERIA	LOADING	COMPLIES WITH CONC LOADING
BOD	25.0 MG/L	NA	INSUFFICIENT DATA
SS	30.0 MG/L	NA	INSUFFICIENT DATA
TP	1.0 MG/L	NA	INSUFFICIENT DATA

NOTE:

BOD - ASSESSED MONTHLY
 SS - ASSESSED MONTHLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KINGSVILLE
 PLANT : KINGSVILLE LAGOON
 WORKS NUMBER : 120001078
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 2.75 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ESSEX
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : WIGLE CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 5,200

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.09	2.91	3.13	3.75	3.72	5.35	4.48	4.07	4.06	3.27	3.56	2.51	3.74	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	INSUFFICIENT DATA
SS	25.0 MG/L	INSUFFICIENT DATA
TP	1.0 MG/L	INSUFFICIENT DATA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LEAMINGTON
 PLANT : LEAMINGTON WPCP
 WORKS NUMBER : 120001069
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 19.09 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ESSEX
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE ERIE
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 12,600

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	17.72	21.46	15.15	20.63	21.26	25.22	18.99	27.83	37.19	19.36	16.74	13.64	21.27	
<u>BOD5</u>														
INFLUENT (MG/L)	180.0	237.0	205.0	172.0	293.0	75.0	172.0	158.0	354.0	540.0	224.0	247.0	238.1	
EFFLUENT (MG/L)	3.5	0.6	4.1	3.5	5.0	9.0	2.3	4.4	8.2	5.1	3.7	3.5	4.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	62.02	12.87	62.11	72.20	106.30	226.98	43.67	122.45	304.95	98.73	61.93	47.74	93.59	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	144.0	243.0	155.0	188.0	263.0	80.0	158.0	179.0	881.0	1,003.0	180.0	282.0	313.0	
EFFLUENT (MG/L)	13.4	5.2	10.5	8.8	13.9	17.0	9.2	10.2	18.3	17.3	10.0	11.8	12.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	237.44	111.59	159.07	181.54	295.51	428.74	174.70	283.86	680.57	334.92	167.40	160.95	257.37	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	1.5	1.7	3.3	6.5	4.0	4.0	3.7	3.8	4.8	6.3	3.7	3.7	3.9	
EFFLUENT (MG/L)	0.2	0.3	0.6	1.1*	1.0	1.0	0.5	0.7	0.8	0.7	0.4	0.5	0.7	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	3.54	6.43	9.09	22.69	21.26	25.22	9.49	19.48	29.75	13.55	6.69	6.82	14.89	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LISTOWEL
 PLANT : LISTOWEL LAGOON CONT DIS (SUMMER SPRAY)
 WORKS NUMBER : 110000409
 TREATMENT : AERATED CELL PLUS LAGOON
 : LAGOON AND SPRAY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 DESIGN CAPACITY : 4.91 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : PERTH
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : CHAPMAN DRAIN
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,554

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.37	3.90	6.49	6.76	5.12	5.16	3.36	3.35	3.57	3.79	5.69	4.05	4.55	
LAGOON DISCHARGE	20.91	ND	286.31	443.24	ND	ND	ND	ND	ND	ND	337.68	340.03	285.63	
<u>BOD5</u>														
INFLUENT (MG/L)	324.0	345.0	256.0	342.0	205.0	643.0	258.0	275.0	287.0	351.0	184.0	205.0	306.3	
EFFLUENT (MG/L)	33.3	ND	34.1	26.1	ND	ND	ND	ND	ND	ND	14.9	26.6	27.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	112.22	ND	221.30	176.43	ND	ND	ND	ND	ND	ND	84.78	107.73	122.85	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	243.0	306.0	169.0	293.0	120.0	635.0	147.0	324.0	444.0	284.0	220.0	176.0	280.1	
EFFLUENT (MG/L)	41.9	ND	44.2	32.1	ND	ND	ND	ND	ND	ND	17.1	28.0	32.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	141.20	ND	286.85	216.99	ND	ND	ND	ND	ND	ND	97.29	113.40	148.79	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	3.7	4.0	2.8	4.3	4.0	4.7	5.4	4.6	4.6	4.9	3.5	4.0	4.2	
EFFLUENT (MG/L)	1.2*	ND	1.4*	1.1*	ND	ND	ND	ND	ND	ND	0.6	0.9	1.0	3
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	4.04	ND	9.08	7.43	ND	ND	ND	ND	ND	ND	3.41	3.64	4.55	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989	1992/12	
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LOBO
 PLANT : KILWORTH HEIGHTS WPCP
 WORKS NUMBER : 110003362
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.26 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : MIDDLESEC
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : THAMES RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 400

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.10	0.10	0.09	0.13	0.11	0.11	0.12	0.12	0.11	0.12	0.13	0.12	0.11	
BOD5														
INFLUENT (MG/L)	59.0	77.0	124.0	36.0	89.0	93.0	55.0	74.0	112.0	125.0	87.0	160.0	90.9	
EFFLUENT (MG/L)	3.1	0.8	6.1	7.2	7.6	13.4	6.7	8.0	9.3	6.6	8.1	10.6	7.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.31	0.08	0.54	0.93	0.83	1.47	0.80	0.96	1.02	0.79	1.05	1.27	0.80	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	198.0	144.0	301.0	85.0	186.0	210.0	116.0	176.0	258.0	229.0	137.0	149.0	182.4	
EFFLUENT (MG/L)	1.9	1.6	3.9	3.7	17.0	6.7	4.2	3.4	3.4	5.0	2.9	5.8	5.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.19	0.16	0.35	0.48	1.87	0.73	0.50	0.40	0.37	0.60	0.37	0.69	0.55	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.3	11.6	8.8	1.9	5.2	4.5	5.2	4.0	6.5	6.1	4.9	5.8	5.7	
EFFLUENT (MG/L)	0.2	0.1	0.2	0.2	0.7	0.5	0.4	0.5	0.7	0.5	0.5	0.3	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.02	0.01	0.01	0.02	0.07	0.05	0.04	0.06	0.07	0.06	0.06	0.03	0.04	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENVIRONMENTAL ASSESSMENT BEING CONDUCTED

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1990/01	1992/12	
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LONDON
 PLANT : ADELAIDE WPCP
 WORKS NUMBER : 120000872
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 18.18 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : MIDDLESEC
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : THAMES RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 35,678

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	21.91	20.34	21.11	23.82	22.49	25.62	22.01	22.32	22.66	19.16	21.16	22.32	22.08	
BOD5														
INFLUENT (MG/L)	233.0	170.0	144.0	151.0	132.0	131.0	197.0	106.0	159.0	197.0	104.0	180.0	158.7	
EFFLUENT (MG/L)	2.0	2.0	4.0	2.0	3.0	3.0	2.0	2.0	4.0	2.0	2.0	3.0	2.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	43.82	40.68	84.44	47.64	67.47	76.86	44.02	44.64	90.64	38.32	42.32	66.96	57.41	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	186.0	149.0	151.0	121.0	129.0	145.0	168.0	130.0	209.0	188.0	120.0	163.0	154.9	
EFFLUENT (MG/L)	7.0	5.0	5.0	5.0	5.0	5.0	6.0	6.0	7.0	7.0	5.0	7.0	5.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	153.37	101.70	105.55	119.10	112.45	128.10	132.06	133.92	158.62	134.12	105.80	156.24	128.06	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.5	5.3	4.8	6.0	5.8	5.0	6.7	5.8	6.0	7.8	5.6	5.8	5.9	
EFFLUENT (MG/L)	0.7	0.4	0.5	0.6	0.3	0.5	0.7	0.5	0.5	0.5	0.5	0.6	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	15.33	8.13	10.55	14.29	6.74	12.81	15.40	11.16	11.33	9.58	10.58	13.39	11.04	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LONDON
 PLANT : GREENWAY WPCP
 WORKS NUMBER : 120000863
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 124.33 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : MIDDLESEC
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : THAMES RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 168,274

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	114.65	101.94	114.24	130.51	118.73	129.57	119.68	125.46	124.60	143.66	125.52	103.11	120.97	
BOD5														
INFLUENT (MG/L)	306.0	243.0	213.0	255.0	270.0	252.0	334.0	373.0	408.0	387.0	152.0	398.0	299.3	
EFFLUENT (MG/L)	3.0	4.0	6.0	5.0	5.0	6.0	3.0	3.0	4.0	4.0	5.0	1.0	4.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	343.95	407.76	685.44	652.55	593.65	777.42	359.04	376.38	498.40	574.64	627.60	103.11	495.98	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	185.0	169.0	166.0	191.0	235.0	241.0	253.0	201.0	294.0	263.0	160.0	163.0	210.1	
EFFLUENT (MG/L)	11.0	10.0	16.0	12.0	11.0	12.0	7.0	7.0	8.0	10.0	12.0	16.0	11.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1261.15	1019.40	1827.84	1566.12	1306.03	1554.84	837.76	878.22	996.80	1436.60	1506.24	1649.76	1330.67	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.0	6.9	5.3	7.0	8.5	7.1	8.7	8.4	8.8	10.1	6.5	6.0	7.5	
EFFLUENT (MG/L)	0.8	0.8	0.6	0.8	0.8	0.5	1.0	0.6	0.4	1.0	0.9	0.8	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	91.72	81.55	68.54	104.40	94.98	64.78	119.68	75.27	49.84	143.66	112.96	82.48	96.78	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LONDON
 PLANT : OXFORD WPCP
 WORKS NUMBER : 120000854
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 5.45 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : MIDDLESEC
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : THAMES RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 16,224

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.15	4.79	4.99	4.71	5.39	5.33	4.82	4.98	4.73	4.48	4.75	6.02	5.01	
BOD5														
INFLUENT (MG/L)	166.0	123.0	146.0	117.0	147.0	83.0	137.0	118.0	157.0	208.0	129.0	145.0	139.7	
EFFLUENT (MG/L)	2.0	7.0	6.0	3.0	5.0	3.0	3.0	5.0	4.0	3.0	3.0	4.0	4.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.30	33.53	29.94	14.13	26.95	15.99	14.46	24.90	18.92	13.44	14.25	24.08	20.04	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	166.0	147.0	141.0	110.0	163.0	115.0	155.0	144.0	164.0	169.0	105.0	132.0	142.6	
EFFLUENT (MG/L)	7.0	12.0	7.0	5.0	6.0	7.0	6.0	14.0	9.0	8.0	8.0	5.0	7.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	36.05	57.48	34.93	23.55	32.34	37.31	28.92	69.72	42.57	35.84	38.00	30.10	39.08	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.2	6.5	6.3	5.2	7.6	4.9	6.9	6.6	7.1	8.8	6.6	6.4	6.7	
EFFLUENT (MG/L)	0.7	0.5	0.3	0.9	0.5	0.6	ND	0.9	0.5	0.6	1.0	0.8	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	3.60	2.39	1.49	4.23	2.69	3.19	ND	4.48	2.36	2.68	4.75	4.81	3.51	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LONDON
 PLANT : POTTERSBURG WPCP
 WORKS NUMBER : 120000836
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 22.04 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : MIDDLESEC
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : THAMES RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 25,653

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	20.40	18.23	19.65	21.92	18.68	18.16	15.27	15.71	16.21	15.96	19.07	16.35	17.97	
BOD5														
INFLUENT (MG/L)	197.0	152.0	135.0	164.0	191.0	154.0	210.0	214.0	187.0	239.0	155.0	205.0	183.6	
EFFLUENT (MG/L)	3.0	5.0	4.0	3.0	5.0	4.0	3.0	5.0	4.0	3.0	3.0	5.0	3.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	61.20	91.15	78.60	65.76	93.40	72.64	45.81	78.55	64.84	47.88	57.21	81.75	70.08	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	117.0	123.0	126.0	143.0	152.0	131.0	155.0	185.0	174.0	164.0	123.0	152.0	145.4	
EFFLUENT (MG/L)	5.0	10.0	8.0	5.0	7.0	5.0	4.0	7.0	5.0	5.0	6.0	8.0	6.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	102.00	182.30	157.20	109.60	130.76	90.80	61.08	109.97	81.05	79.80	114.42	130.80	113.21	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.4	5.3	4.7	7.1	6.6	4.9	6.2	7.2	6.3	8.2	5.9	6.4	6.2	
EFFLUENT (MG/L)	0.6	0.7	0.6	0.7	0.8	0.9	0.9	0.6	0.5	0.8	0.8	0.6	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	12.24	12.76	11.79	15.34	14.94	16.34	13.74	9.42	8.10	12.76	15.25	9.81	12.58	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LONDON
 PLANT : VAUXHALL WPCP
 WORKS NUMBER : 120000845
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 20.91 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : MIDDLESEC
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : THAMES RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 22,981

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	19.03	18.14	18.10	18.61	16.79	17.67	16.25	17.47	17.29	17.00	17.10	14.15	17.30	
BOD5														
INFLUENT (MG/L)	364.0	278.0	348.0	305.0	245.0	276.0	387.0	326.0	295.0	370.0	221.0	328.0	311.9	
EFFLUENT (MG/L)	2.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	2.0	4.0	3.0	3.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	38.06	72.56	72.40	74.44	67.16	70.68	65.00	52.41	69.16	34.00	68.40	42.45	60.55	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	171.0	165.0	194.0	166.0	170.0	229.0	171.0	219.0	239.0	257.0	192.0	209.0	198.5	
EFFLUENT (MG/L)	8.0	8.0	9.0	9.0	7.0	7.0	7.0	6.0	6.0	5.0	9.0	5.0	7.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	152.24	145.12	162.90	167.49	117.53	123.69	113.75	104.82	103.74	85.00	153.90	70.75	124.56	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.1	5.2	4.2	5.7	5.4	4.4	4.8	7.5	6.5	7.7	5.1	5.6	5.7	
EFFLUENT (MG/L)	0.3	0.4	0.3	0.6	0.8	0.6	0.7	1.0	0.8	0.7	0.7	0.6	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	5.70	7.25	5.43	11.16	13.43	10.60	11.37	17.47	13.83	11.90	11.97	8.49	10.38	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LUCAN
 PLANT : LUCAN LAGOON
 WORKS NUMBER : 110000855
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 DESIGN CAPACITY : 0.29 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : MIDDLESEC
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LITTLE AUSABLE RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,650

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.86	0.69	0.92	1.26	0.73	0.79	0.47	0.55	0.76	ND	0.96	0.63	0.78	
LAGOON DISCHARGE	26.79	19.35	28.57	4.05	29.59	ND	ND	4.79	22.91	ND	ND	ND	19.44	
BOD5														
INFLUENT (MG/L)	129.0	142.0	138.0	71.0	ND	71.0	38.0	37.0	69.0	ND	73.0	108.0	87.6	
EFFLUENT (MG/L)	ND	28.8	26.7	19.6	18.9	ND	ND	ND	18.3	ND	ND	ND	22.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	19.87	24.56	24.69	13.79	ND	ND	ND	13.90	ND	ND	ND	17.55	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	91.0	160.0	152.0	70.0	ND	59.0	36.0	19.0	69.0	ND	79.0	87.0	82.2	
EFFLUENT (MG/L)	ND	33.6	32.5	20.1	20.4	ND	ND	ND	22.5	ND	ND	ND	25.8	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	23.18	29.90	25.32	14.89	ND	ND	ND	17.10	ND	ND	ND	20.12	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.1	6.9	8.3	6.3	ND	3.3	3.2	2.8	4.5	ND	4.0	6.0	5.2	
EFFLUENT (MG/L)	ND	2.3	2.4	1.9	0.4	ND	ND	ND	1.4	ND	ND	ND	1.7	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	1.58	2.20	2.39	0.29	ND	ND	ND	1.06	ND	ND	ND	1.33	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988	1991/12	1992/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MAIDSTONE
 PLANT : BELLE RIVER-MAIDSTONE WPCP
 WORKS NUMBER : 110002078
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 6.81 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ESSEX
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE ST. CLAIR
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 8,568

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.09	4.52	4.79	5.82	4.93	6.62	5.86	4.90	4.78	4.57	4.78	4.16	5.07	
BOD5														
INFLUENT (MG/L)	113.0	101.0	118.0	108.0	121.0	93.0	86.0	93.0	93.0	81.0	84.0	117.0	100.7	
EFFLUENT (MG/L)	2.0	1.1	4.4	3.5	3.2	2.0	1.7	1.5	1.4	2.5	1.3	4.5	2.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.18	4.97	21.07	20.37	15.77	13.24	9.96	7.35	6.69	11.42	6.21	18.72	12.17	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	108.0	133.0	120.0	114.0	133.0	99.0	89.0	111.0	129.0	130.0	105.0	134.0	117.1	
EFFLUENT (MG/L)	10.7	10.8	13.8	13.9	10.0	10.5	9.1	7.0	5.4	6.1	10.9	9.9	9.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	54.46	48.81	66.10	80.89	49.30	69.51	53.32	34.30	25.81	27.87	52.10	41.18	49.69	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.0	3.4	3.8	2.9	3.6	3.8	3.6	3.1	4.8	4.0	3.3	4.8	3.7	
EFFLUENT (MG/L)	0.3	0.2	0.3	0.2	0.5	0.5	0.3	0.4	0.4	0.4	0.5	0.4	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	1.52	0.90	1.43	1.16	2.46	3.31	1.75	1.96	1.91	1.82	2.39	1.66	2.03	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE END DATE ANTICIPATED
 COMPLIANCE

1988 1991/12

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MARKDALE
 PLANT : MARKDALE LAGOON
 WORKS NUMBER : 110000418
 TREATMENT : AERATED LAGOON
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EXFILTRATION LAGOON
 DESIGN CAPACITY : 1.12 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : GREY
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : NO DISC.TO SURFACE WATER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,235

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.39	0.39	0.60	0.54	0.44	0.46	0.36	0.36	0.32	0.35	0.43	0.35	0.42	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
<u>BOD5</u>														
INFLUENT (MG/L)	132.0	131.0	189.0	89.0	158.0	253.0	199.0	267.0	118.0	186.0	165.0	147.0	169.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	105.0	120.0	166.0	64.0	94.0	155.0	144.0	180.0	91.0	127.0	98.0	70.0	117.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	9.3	7.8	7.0	5.4	12.1	5.5	16.4	12.4	10.1	8.7	6.9	10.3	9.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:

BOD - HAS NO CRITERIA
 SS - HAS NO CRITERIA
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING EVALUATED

START DATE END DATE ANTICIPATED
 COMPLIANCE

1988 1990/12

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MC GILLIVRAY
 PLANT : PARKHILL LAGOON
 WORKS NUMBER : 110002461
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 1.10 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : MIDDLESEC
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : PARKHILL CREEK
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,544

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.64	0.59	0.64	0.64	0.58	0.83	0.91	0.71	1.53	0.61	0.77	0.62	0.76	
LAGOON DISCHARGE	ND	ND	ND	ND	130.77	ND	ND	ND	ND	90.81	ND	ND	110.79	
BOD5														
INFLUENT (MG/L)	114.0	126.0	ND	97.0	150.0	133.0	166.0	55.0	117.0	121.0	99.0	121.0	118.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	4.0	ND	ND	ND	ND	1.6	ND	ND	2.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	2.32	ND	ND	ND	ND	0.97	ND	ND	2.13	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	143.0	148.0	ND	78.0	116.0	89.0	180.0	375.0	136.0	81.0	103.0	85.0	139.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	9.8	ND	ND	ND	ND	10.9	ND	ND	10.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	5.68	ND	ND	ND	ND	6.64	ND	ND	7.90	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.2	7.5	ND	8.3	5.4	5.8	8.6	9.0	8.3	5.4	6.3	6.3	7.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.3	ND	ND	ND	ND	0.1	ND	ND	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.17	ND	ND	ND	ND	0.06	ND	ND	0.15	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE END DATE ANTICIPATED
 COMPLIANCE

1988/02 1990/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MEAFORD
 PLANT : MEAFORD WPCP
 WORKS NUMBER : 110000445
 TREATMENT : HIGH RATE
 :
 :
 :
 DESIGN CAPACITY : 3.91 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : GREY
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : GEORGIAN BAY
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,318

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.88	2.93	4.11	3.25	2.61	3.02	2.31	2.28	2.21	2.35	2.86	2.85	2.89	
BOD5														
INFLUENT (MG/L)	54.0	75.0	45.0	54.0	58.0	55.0	90.0	61.0	92.0	79.0	55.0	94.0	67.7	
EFFLUENT (MG/L)	10.6	4.8	7.7	7.8	11.1	16.3	21.0	4.3	7.2	16.0	7.3	10.5	10.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	41.12	14.06	31.64	25.35	28.97	49.22	48.51	9.80	15.91	37.60	20.87	29.92	30.06	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	72.0	85.0	105.0	41.0	129.0	96.0	132.0	86.0	136.0	82.0	46.0	63.0	89.4	
EFFLUENT (MG/L)	20.9	7.3	13.0	7.1	6.6	7.0	7.3	4.6	6.3	8.5	7.3	6.9	8.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	81.09	21.38	53.43	23.07	17.22	21.14	16.86	10.48	13.92	19.97	20.87	19.66	24.85	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.9	4.6	2.8	3.1	3.5	4.0	3.0	10.5	6.7	4.9	3.6	5.0	4.6	
EFFLUENT (MG/L)	2.1	2.4	1.6	1.9	2.3	2.5	2.2	3.8	4.3	4.1	2.1	2.5	2.7	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	8.14	7.03	6.57	6.17	6.00	7.55	5.08	8.66	9.50	9.63	6.00	7.12	7.80	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENVIRONMENTAL ASSESSMENT BEING CONDUCTED
 FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988	1992/12	
1987	1990/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MILD MAY
 PLANT : MILD MAY WPCP
 WORKS NUMBER : 110002194
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.96 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : BRUCE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : OTTER CREEK
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 973

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.80	0.70	0.83	0.79	0.73	0.75	0.71	0.64	0.58	0.58	0.67	0.60	0.70	
BOD5														
INFLUENT (MG/L)	128.0	79.0	97.0	81.0	95.0	64.0	97.0	83.0	89.0	84.0	90.0	77.0	88.7	
EFFLUENT (MG/L)	4.5	4.7	3.8	2.6	3.6	1.2	1.3	0.8	1.6	2.5	4.4	2.9	2.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.60	3.29	3.15	2.05	2.62	0.90	0.92	0.51	0.92	1.45	2.94	1.74	1.96	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	299.0	149.0	156.0	103.0	127.0	139.0	137.0	209.0	155.0	98.0	120.0	103.0	149.6	
EFFLUENT (MG/L)	5.6	5.5	6.3	6.0	6.5	4.9	4.1	4.7	8.2	4.5	4.8	5.2	5.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.48	3.85	5.22	4.74	4.74	3.67	2.91	3.00	4.75	2.61	3.21	3.12	3.85	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.7	4.9	5.7	5.3	5.9	4.7	5.2	4.6	6.1	5.7	5.1	3.8	5.3	
EFFLUENT (MG/L)	0.4	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.3	1.1*	0.4	0.2	0.4	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.32	0.21	0.24	0.23	0.29	0.30	0.35	0.32	0.17	0.63	0.26	0.12	0.28	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

EQUIPMENT/MAINTENANCE - NEW EQUIPMENT BEING INSTALLED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989/10	1989/11	1989/11

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MILVERTON
 PLANT : MILVERTON LAGOON
 WORKS NUMBER : 110001079
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : AERATED CELL PLUS LAGOON
 : PHOSPHORUS REMOVAL-CONTINUOUS
 DESIGN CAPACITY : 1.01 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : PERTH
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : BOYLE DRAIN
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,484

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.73	0.55	0.72	0.78	0.76	0.79	0.49	0.95	0.47	0.58	0.68	0.58	0.67	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	96.00	672.00	ND	384.00	
BOD5														
INFLUENT (MG/L)	126.0	129.0	89.0	96.0	134.0	119.0	65.0	173.0	122.0	154.0	160.0	ND	124.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.4	ND	8.4	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.71	ND	5.63	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	160.0	142.0	82.0	105.0	101.0	116.0	102.0	186.0	124.0	350.0	181.0	ND	149.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	30.4	ND	30.4	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.67	ND	20.37	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.9	8.4	5.6	6.6	7.0	7.5	8.2	11.7	9.3	10.0	16.3	ND	8.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3	ND	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.20	ND	0.20	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MITCHELL
 PLANT : MITCHELL LAGOON
 WORKS NUMBER : 110000472
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 3.56 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : PERTH
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : THAMES RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,078

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.94	2.28	2.78	3.15	2.26	2.23	1.77	1.74	1.82	1.89	2.72	2.02	2.30	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	338.0	451.0	403.0	276.0	530.0	403.0	414.0	359.0	574.0	593.0	173.0	296.0	400.8	
EFFLUENT (MG/L)	ND	ND	ND	20.2	ND	ND	ND	ND	ND	ND	16.4	16.0	17.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	63.63	ND	ND	ND	ND	ND	ND	44.60	32.32	40.25	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	199.0	375.0	226.0	237.0	390.0	228.0	232.0	132.0	636.0	531.0	192.0	320.0	308.2	
EFFLUENT (MG/L)	ND	ND	ND	41.4	ND	ND	ND	ND	ND	ND	41.5	23.2	35.4	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	130.41	ND	ND	ND	ND	ND	ND	112.88	46.86	81.42	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	11.4	11.9	8.7	7.1	12.5	9.6	12.5	10.5	17.2	11.7	13.0	13.7	11.7	
EFFLUENT (MG/L)	ND	ND	ND	0.8	ND	ND	ND	ND	ND	ND	0.5	0.7	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	ND	ND	ND	2.52	ND	ND	ND	ND	ND	ND	1.36	1.41	1.61	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - CONVERTING TO ALTERNATIVE PROCESS

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988	1992/12	
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MOORE
 PLANT : BRIGDEN P.V. LAGOON
 WORKS NUMBER : 110002023
 TREATMENT : CONVENTIONAL LAGOON ANNUAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.33 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : LAMBTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BEAR CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 641

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.22	0.22	0.27	0.27	0.24	0.27	0.22	0.24	0.26	0.26	0.28	0.25	0.25	
LAGOON DISCHARGE	ND	ND	ND	44.52	ND	ND	ND	ND	ND	ND	ND	ND	44.52	
BOD5														
INFLUENT (MG/L)	ND	179.0	159.0	113.0	146.0	133.0	176.0	213.0	201.0	182.0	169.0	202.0	170.3	
EFFLUENT (MG/L)	ND	ND	ND	13.6	ND	ND	ND	ND	ND	ND	ND	ND	13.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	3.67	ND	ND	ND	ND	ND	ND	ND	ND	3.40	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	131.0	156.0	134.0	154.0	151.0	163.0	314.0	202.0	283.0	112.0	125.0	175.0	
EFFLUENT (MG/L)	ND	ND	ND	44.3	ND	ND	ND	ND	ND	ND	ND	ND	44.3*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	11.96	ND	ND	ND	ND	ND	ND	ND	ND	11.08	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	10.1	9.3	8.2	9.2	9.6	10.7	8.2	9.9	10.4	9.4	11.4	9.7	
EFFLUENT (MG/L)	ND	ND	ND	0.9	ND	ND	ND	ND	ND	ND	ND	ND	0.9	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.24	ND	ND	ND	ND	ND	ND	ND	ND	0.23	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988/02	1990/01	1990/04
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MOORE
 PLANT : CORUNNA P.V. WPCP
 WORKS NUMBER : 110000481
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 4.54 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : LAMBTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : ST. CLAIR RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 5,650

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.16	2.10	2.31	2.20	2.06	2.19	1.93	1.92	2.16	2.09	2.33	2.84	2.19	
BOD5														
INFLUENT (MG/L)	89.0	119.0	175.0	108.0	111.0	107.0	119.0	111.0	103.0	210.0	150.0	170.0	131.0	
EFFLUENT (MG/L)	3.7	11.9	8.7	4.2	7.5	3.7	3.6	0.6	4.0	4.7	7.7	3.7	5.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.99	24.99	20.09	9.24	15.45	8.10	6.94	1.15	8.64	9.82	17.94	10.50	11.61	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	91.0	122.0	192.0	97.0	98.0	101.0	82.0	118.0	127.0	208.0	76.0	89.0	116.8	
EFFLUENT (MG/L)	11.2	12.8	10.9	7.6	9.1	7.0	5.3	5.9	8.5	8.3	10.3	7.7	8.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	24.19	26.88	25.17	16.72	18.74	15.33	10.22	11.32	18.36	17.34	23.99	21.86	19.05	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.1	6.9	7.0	6.4	3.8	6.3	7.0	6.4	6.3	9.2	6.5	7.5	6.7	
EFFLUENT (MG/L)	0.3	0.5	0.2	0.1	0.1	0.2	0.3	0.5	0.4	0.3	0.2	0.2	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.64	1.05	0.46	0.22	0.20	0.43	0.57	0.96	0.86	0.62	0.46	0.56	0.66	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MOORE
 PLANT : COURTRIGHT WPCP
 WORKS NUMBER : 110001818
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.68 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : LAMBTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : ST CLAIR RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,526

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.55	0.50	0.61	0.61	0.55	0.53	0.47	0.47	0.54	0.50	0.56	0.46	0.53	
BOD5														
INFLUENT (MG/L)	105.0	561.0	215.0	115.0	215.0	118.0	102.0	111.0	78.0	163.0	155.0	263.0	183.4	
EFFLUENT (MG/L)	12.0	9.5	8.7	3.2	4.1	4.8	4.2	3.3	15.0	3.5	3.6	2.9	6.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.60	4.75	5.30	1.95	2.25	2.54	1.97	1.55	8.10	1.75	2.01	1.33	3.29	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	133.0	715.0	347.0	114.0	269.0	99.0	89.0	73.0	81.0	136.0	116.0	542.0	226.2	
EFFLUENT (MG/L)	19.3	11.1	15.1	4.7	4.1	8.9	7.6	9.4	11.3	0.9	2.0	3.2	8.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.61	5.55	9.21	2.86	2.25	4.71	3.57	4.41	6.10	0.45	1.12	1.47	4.29	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.5	20.2	10.0	7.8	8.9	9.2	7.1	6.1	6.3	6.3	9.0	16.6	9.6	
EFFLUENT (MG/L)	0.3	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.1	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.16	0.15	0.12	0.06	0.11	0.10	0.09	0.09	0.16	0.10	0.05	0.04	0.11	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NORMANBY
 PLANT : NEUSTADT LAGOON
 WORKS NUMBER : 110002443
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.41 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : GREY
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : SOUTH SAUGEEN RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 463

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.17	0.12	0.18	0.18	0.15	0.13	0.09	0.08	0.08	0.09	0.15	0.13	0.13	
LAGOON DISCHARGE	ND	ND	ND	ND	39.14	ND	ND	ND	ND	ND	ND	ND	39.14	
BOD5														
INFLUENT (MG/L)	97.0	125.0	113.0	85.0	151.0	114.0	121.0	142.0	229.0	127.0	145.0	134.0	131.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	0.37	ND	ND	ND	ND	ND	ND	ND	0.33	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	96.0	121.0	112.0	70.0	136.0	152.0	82.0	142.0	292.0	131.0	169.0	131.0	136.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	7.6	ND	ND	ND	ND	ND	ND	ND	7.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	1.14	ND	ND	ND	ND	ND	ND	ND	0.99	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.1	7.4	6.6	5.0	5.7	7.9	7.0	8.7	10.6	9.8	9.1	6.5	7.5	
EFFLUENT (MG/L)	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988/02 1990/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NORWICH
 PLANT : NORWICH LAGOON
 WORKS NUMBER : 110001480
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.99 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : OXFORD
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BIG OTTER CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,313

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.86	0.77	0.88	1.02	0.79	0.81	0.67	0.65	0.62	0.64	0.99	0.74	0.79	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	100.0	149.0	145.0	71.0	136.0	208.0	189.0	140.0	166.0	175.0	227.0	236.0	161.8	
EFFLUENT (MG/L)	ND	ND	ND	12.7	ND	ND	ND	ND	ND	1.9	12.3	ND	9.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	12.95	ND	ND	ND	ND	ND	1.21	12.17	ND	7.11	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	279.0	144.0	337.0	103.0	270.0	216.0	159.0	162.0	122.0	99.0	170.0	147.0	184.0	
EFFLUENT (MG/L)	ND	ND	ND	6.5	ND	ND	ND	ND	ND	2.4	19.2	ND	9.4	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	6.63	ND	ND	ND	ND	ND	1.53	19.00	ND	7.43	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.0	8.2	8.4	5.1	7.0	9.1	9.3	5.2	7.9	7.7	10.3	10.1	7.9	
EFFLUENT (MG/L)	ND	ND	ND	0.3	ND	ND	ND	ND	ND	0.3	0.5	ND	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.30	ND	ND	ND	ND	ND	0.19	0.49	ND	0.32	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : OIL SPRINGS
 PLANT : OIL SPRINGS LAGOON
 WORKS NUMBER : 110001998
 TREATMENT : CONVENTIONAL LAGOON ANNUAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.27 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : LAMBTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BLACK CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 609

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.18	0.17	0.20	0.23	0.16	0.18	0.15	0.15	0.20	0.17	0.20	0.17	0.18	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	97.0	45.0	14.0	102.0	119.0	112.0	113.0	115.0	113.0	133.0	162.0	101.0	102.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	3.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.57	ND	ND	0.61	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	87.0	53.0	24.0	68.0	109.0	68.0	115.0	93.0	113.0	88.0	101.0	61.0	81.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	29.4	ND	ND	29.4*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.99	ND	ND	5.29	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.9	8.5	4.5	7.8	7.0	8.0	7.9	8.1	7.7	6.5	7.9	8.5	7.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3	ND	ND	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.05	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05	ND	ND	0.05	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988/02	1990/01	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : OWEN SOUND
 PLANT : OWEN SOUND WPCP
 WORKS NUMBER : 110000551
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 24.54 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : GREY
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : GEORGIAN BAY
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 20,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	17.33	13.04	20.25	15.56	12.92	15.00	10.67	10.58	10.67	10.54	15.17	11.74	13.62	
BOD5														
INFLUENT (MG/L)	62.0	74.0	82.0	43.0	81.0	50.0	97.0	118.0	101.0	172.0	142.0	97.0	93.3	
EFFLUENT (MG/L)	23.6	27.4	21.1	22.0	29.6	14.6	27.8	25.3	36.4	34.7	31.7	20.0	26.2	
LOADING (KG/D)	408.98	357.29	427.27	342.32	382.43	219.00	296.62	267.67	388.38	365.73	480.88	234.80	356.84	
PERCENT REMOVAL	62	63	74	49	63	71	71	79	64	80	78	79	72	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	104.0	119.0	104.0	108.0	110.0	113.0	118.0	123.0	132.0	116.0	136.0	117.0	116.7	
EFFLUENT (MG/L)	28.7	18.7	22.0	18.4	20.8	23.8	18.3	25.4	28.5	20.1	22.0	23.5	22.5	
LOADING (KG/D)	497.37	243.84	445.50	286.30	268.73	357.00	195.26	268.73	304.09	211.85	333.74	275.89	306.45	
PERCENT REMOVAL	72	84	79	83	81	79	84	79	78	83	84	80	81	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.8	4.6	3.5	2.2	3.9	3.4	4.3	5.9	4.9	5.2	4.2	4.4	4.2	
EFFLUENT (MG/L)	0.9	0.7	0.7	0.5	0.5	0.5	0.9	0.5	1.0	1.0	1.0	0.4	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	15.59	9.12	14.17	7.78	6.46	7.50	9.60	5.29	10.67	10.54	15.17	4.69	9.53	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - ENFORCING SEWER-USE BYLAWS
 MANPOWER - ADDITIONAL STAFF BEING HIRED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989	1990/06	1990/01
1989	1989/06	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PAISLEY
 PLANT : PAISLEY WPCP
 WORKS NUMBER : 110001907
 TREATMENT : OXIDATION DITCH
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.70 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : BRUCE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : SAUGEEN RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 653

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.41	0.32	0.39	0.35	0.30	0.34	0.28	0.28	0.29	0.32	0.37	0.35	0.33	
BOD5														
INFLUENT (MG/L)	60.0	108.0	109.0	65.0	86.0	67.0	87.0	114.0	89.0	84.0	68.0	114.0	87.6	
EFFLUENT (MG/L)	3.7	7.8	4.3	2.3	1.6	1.8	0.9	1.3	1.3	2.0	2.5	5.9	3.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.51	2.49	1.67	0.80	0.48	0.61	0.25	0.36	0.37	0.64	0.92	2.06	0.99	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	96.0	266.0	136.0	60.0	105.0	96.0	150.0	103.0	138.0	101.0	219.0	91.0	130.1	
EFFLUENT (MG/L)	4.9	14.7	4.7	2.5	3.0	3.0	2.6	4.1	1.6	2.6	5.6	16.3	5.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.00	4.70	1.83	0.87	0.90	1.02	0.72	1.14	0.46	0.83	2.07	5.70	1.82	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.6	5.4	5.5	4.4	5.8	5.9	6.3	5.5	6.1	5.0	5.1	6.1	5.6	
EFFLUENT (MG/L)	0.4	0.8	0.4	0.3	0.4	0.5	0.6	0.8	0.5	0.5	0.5	0.7	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.16	0.25	0.15	0.10	0.12	0.17	0.16	0.22	0.14	0.16	0.18	0.24	0.17	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988 1991/12

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PETROLIA
 PLANT : PETROLIA WPCP + LAGOON
 WORKS NUMBER : 110000579
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 3.18 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : LAMBTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BEAR CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,168

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.44	1.57	1.56	1.73	1.67	1.68	1.37	1.54	1.58	1.49	1.75	1.59	1.58	
BOD5														
INFLUENT (MG/L)	152.0	134.0	138.0	175.0	175.0	306.0	169.0	259.0	167.0	140.0	131.0	182.0	177.3	
EFFLUENT (MG/L)	2.7	4.4	1.9	3.4	3.4	1.5	1.2	0.4	0.9	2.2	2.2	5.9	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.88	6.90	2.96	5.88	5.67	2.52	1.64	0.61	1.42	3.27	3.85	9.38	3.95	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	183.0	165.0	166.0	173.0	173.0	344.0	235.0	239.0	200.0	119.0	105.0	112.0	184.5	
EFFLUENT (MG/L)	4.5	6.3	5.5	4.3	4.3	2.5	2.6	2.2	2.0	7.9	2.2	9.1	4.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.48	9.89	8.58	7.43	7.18	4.20	3.56	3.38	3.16	11.77	3.85	14.46	7.11	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.5	7.3	7.0	8.2	8.2	9.1	8.3	7.7	7.6	6.5	5.4	7.1	7.5	
EFFLUENT (MG/L)	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.4	0.5	0.3	0.5	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.43	0.62	0.46	0.51	0.50	0.50	0.41	0.30	0.63	0.74	0.52	0.79	0.47	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PLYMPTON
 PLANT : WYOMING WPCP
 WORKS NUMBER : 110002489
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 1.12 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : LAMBTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : STONEHOUSE DRAIN
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,824

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.48	0.43	0.45	0.47	0.46	0.48	0.45	0.45	0.49	0.48	0.50	0.48	0.47	
<u>BOD5</u>														
INFLUENT (MG/L)	169.0	232.0	162.0	146.0	202.0	163.0	172.0	176.0	167.0	194.0	185.0	196.0	180.3	
EFFLUENT (MG/L)	2.1	4.3	3.1	2.2	3.2	1.6	1.2	0.4	0.8	3.1	2.0	5.1	2.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.00	1.84	1.39	1.03	1.47	0.76	0.54	0.18	0.39	1.48	1.00	2.44	1.13	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	260.0	609.0	232.0	120.0	217.0	179.0	190.0	103.0	260.0	188.0	155.0	113.0	218.8	
EFFLUENT (MG/L)	3.0	6.7	5.7	2.6	4.3	3.0	1.6	1.8	1.3	7.0	1.7	9.2	4.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.44	2.88	2.56	1.22	1.97	1.44	0.72	0.81	0.63	3.36	0.85	4.41	1.88	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	12.5	24.8	11.6	10.8	10.3	10.8	11.8	9.0	11.6	11.0	9.0	10.2	12.0	
EFFLUENT (MG/L)	0.3	0.4	0.3	0.2	0.4	0.2	0.3	0.2	0.3	0.5	0.3	0.5	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.14	0.17	0.13	0.09	0.18	0.09	0.13	0.09	0.14	0.24	0.15	0.24	0.14	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : POINT EDWARD
 PLANT : POINT EDWARD WPCP
 WORKS NUMBER : 110000597
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 2.59 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : LAMBTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : ST. CLAIR RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,120

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.34	1.65	1.51	1.31	1.50	1.54	1.82	1.72	1.68	1.71	1.53	1.43	1.56	
BOD5														
INFLUENT (MG/L)	92.0	99.0	82.0	90.0	104.0	101.0	97.0	45.0	82.0	151.0	55.0	85.0	90.3	
EFFLUENT (MG/L)	66.4	69.2	62.9	56.7	71.5	86.6	63.1	72.6	63.0	64.8	79.8	94.5	70.9	
LOADING (KG/D)	88.97	114.18	94.97	74.27	107.25	133.36	114.84	124.87	105.84	110.80	122.09	135.13	110.60	
PERCENT REMOVAL	28	30	23	37	31	14	35	ND	23	57	ND	ND	21*	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	111.0	119.0	94.0	93.0	119.0	118.0	116.0	67.0	96.0	97.0	51.0	71.0	96.0	
EFFLUENT (MG/L)	41.7	55.5	60.9	42.0	66.9	60.6	55.8	43.1	55.5	52.7	52.3	71.4	54.9	
LOADING (KG/D)	55.87	91.57	91.95	55.02	100.35	93.32	101.55	74.13	93.24	90.11	80.01	102.10	85.64	
PERCENT REMOVAL	62	53	35	55	44	49	52	36	42	46	ND	ND	43*	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	15.8	6.5	4.8	5.7	5.4	7.1	5.3	2.7	4.2	6.2	3.1	5.0	6.0	
EFFLUENT (MG/L)	3.1*	3.4*	3.2*	2.8*	2.3*	3.7*	2.6*	1.1*	1.6*	2.8*	0.8	3.8*	2.6	11
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	4.15	5.61	4.83	3.66	3.45	5.69	4.73	1.89	2.68	4.78	1.22	5.43	4.06	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	50%	NO
SS	70%	NO
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988	1991/12	1992/01

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : PORT BURWELL
 PLANT : PORT BURWELL WPCP
 WORKS NUMBER : 110001319
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.52 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ELGIN
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BIG OTTER CR.- LAKE ERIE
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 780

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.20	0.18	0.19	0.23	0.22	0.22	0.22	0.22	0.20	0.20	0.21	0.17	0.21	
BOD5														
INFLUENT (MG/L)	177.0	289.0	226.0	220.0	201.0	207.0	249.0	209.0	179.0	223.0	176.0	197.0	212.8	
EFFLUENT (MG/L)	3.7	4.3	1.8	4.4	12.0	1.6	1.5	1.2	1.5	2.6	2.7	3.1	3.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.74	0.77	0.34	1.01	2.64	0.35	0.33	0.26	0.30	0.52	0.56	0.52	0.71	
LOADING LIMIT (KG/D)													13.20	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	159.0	219.0	211.0	163.0	161.0	189.0	241.0	188.0	243.0	158.0	144.0	189.0	188.8	
EFFLUENT (MG/L)	9.6	9.0	7.2	8.4	12.8	4.6	6.6	5.4	4.7	6.1	6.3	10.2	7.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.92	1.62	1.36	1.93	2.81	1.01	1.45	1.18	0.94	1.22	1.32	1.73	1.60	
LOADING LIMIT (KG/D)													13.20	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	10.3	10.9	13.0	8.8	9.6	10.6	11.7	9.7	11.3	9.4	9.6	11.5	10.5	
EFFLUENT (MG/L)	0.4	0.5	0.2	0.6	0.5	1.4	0.8	0.5	0.3	0.2	0.3	0.4	0.5	
CONCENTRATION LIMIT (MG/L)													1.0	
LOADING (KG/D)	0.08	0.09	0.03	0.13	0.11	0.30	0.17	0.11	0.06	0.04	0.06	0.06	0.11	
LOADING LIMIT (KG/D)													0.53	

SUMMARY

PARAM	CRITERIA	LOADING	CONC	LOADING	COMPLIES WITH
BOD	25.0 MG/L	13.20 KG/D	YES	YES	YES
SS	25.0 MG/L	13.20 KG/D	YES	YES	YES
TP	1.0 MG/L	0.53 KG/D	YES	YES	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - ELECTRONIC PROCESS CONTROL BEING IMPLEMENTED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989/07	1989/07	1989/07

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PORT BURWELL
 PLANT : PORT BURWELL WPCP
 WORKS NUMBER : 110001319
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.52 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ELGIN
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BIG OTTER CR.- LAKE ERIE
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 780

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.20	0.18	0.19	0.23	0.22	0.22	0.22	0.22	0.20	0.20	0.21	0.17	0.21	
BOD5														
INFLUENT (MG/L)	177.0	289.0	226.0	220.0	201.0	207.0	249.0	209.0	179.0	223.0	176.0	197.0	212.8	
EFFLUENT (MG/L)	3.7	4.3	1.8	4.4	12.0	1.6	1.5	1.2	1.5	2.6	2.7	3.1	3.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.74	0.77	0.34	1.01	2.64	0.35	0.33	0.26	0.30	0.52	0.56	0.52	0.71	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	159.0	219.0	211.0	163.0	161.0	189.0	241.0	188.0	243.0	158.0	144.0	189.0	188.8	
EFFLUENT (MG/L)	9.6	9.0	7.2	8.4	12.8	4.6	6.6	5.4	4.7	6.1	6.3	10.2	7.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.92	1.62	1.36	1.93	2.81	1.01	1.45	1.18	0.94	1.22	1.32	1.73	1.60	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	10.3	10.9	13.0	8.8	9.6	10.6	11.7	9.7	11.3	9.4	9.6	11.5	10.5	
EFFLUENT (MG/L)	0.4	0.5	0.2	0.6	0.5	1.4*	0.8	0.5	0.3	0.2	0.3	0.4	0.5	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.08	0.09	0.03	0.13	0.11	0.30	0.17	0.11	0.06	0.04	0.06	0.06	0.11	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - ELECTRONIC PROCESS CONTROL BEING IMPLEMENTED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989/07	1989/07	1989/07

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PORT ELGIN
 PLANT : PORT ELGIN WPCP
 WORKS NUMBER : 120001470
 TREATMENT : OXIDATION DITCH
 :
 :
 DESIGN CAPACITY : 6.45 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : BRUCE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : SAUGEEN RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 6,115

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.07	4.69	3.98	4.43	3.77	3.94	3.69	3.48	3.45	3.48	3.72	3.90	3.97	
<u>BOD5</u>														
INFLUENT (MG/L)	40.4	72.0	105.0	106.0	66.0	67.0	228.0	60.0	68.0	74.0	91.0	55.0	86.0	
EFFLUENT (MG/L)	4.0	21.5	7.8	6.9	1.8	3.5	4.8	4.5	ND	9.1	3.4	4.2	6.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	20.28	100.83	31.04	30.56	6.78	13.79	17.71	15.66	ND	31.66	12.64	16.38	25.81	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	84.3	144.0	82.0	98.0	105.0	133.0	402.0	232.0	161.0	96.0	206.0	89.0	152.7	
EFFLUENT (MG/L)	9.9	13.8	4.6	7.1	1.7	4.6	5.8	5.8	2.5	3.9	5.1	2.2	5.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	50.19	64.72	18.30	31.45	6.40	18.12	21.40	20.18	8.62	13.57	18.97	8.58	22.23	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	2.9	5.3	4.5	4.6	4.6	4.2	7.1	0.4	5.0	5.5	5.6	4.1	4.5	
EFFLUENT (MG/L)	0.6	0.9	0.7	0.5	0.1	0.9	0.9	0.8	0.8	0.9	1.1	0.5	0.7	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	3.04	4.22	2.78	2.21	0.37	3.54	3.32	2.78	2.76	3.13	4.09	1.95	2.78	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PORT STANLEY
 PLANT : PORT STANLEY LAGOON
 WORKS NUMBER : 110001373
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 1.49 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ELGIN
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : DITCH TO KETTLE CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,416

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.10	0.96	1.06	1.22	1.15	1.44	1.35	1.33	1.22	1.04	1.08	0.98	1.16	
LAGOON DISCHARGE	ND	ND	ND	96.16	111.90	23.80	ND	ND	2.60	102.81	81.58	ND	69.81	
BOD5														
INFLUENT (MG/L)	48.0	45.0	54.0	40.0	33.0	103.0	167.0	42.0	72.0	46.0	45.0	59.0	62.8	
EFFLUENT (MG/L)	ND	ND	ND	24.9	16.1	3.8	ND	ND	ND	7.0	7.8	ND	11.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	30.37	18.51	5.47	ND	ND	ND	7.28	8.42	ND	13.80	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	43.0	58.0	53.0	22.0	21.0	88.0	108.0	60.0	59.0	28.0	42.0	36.0	51.5	
EFFLUENT (MG/L)	ND	ND	ND	30.4	11.9	6.6	ND	ND	ND	12.2	17.5	ND	15.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	37.08	13.68	9.50	ND	ND	ND	12.68	18.90	ND	18.21	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.7	3.1	3.3	2.2	1.9	4.1	6.7	2.7	3.8	3.2	3.7	4.1	3.5	
EFFLUENT (MG/L)	ND	ND	ND	0.9	0.8	1.1*	ND	ND	ND	0.5	0.3	ND	0.7	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	1.09	0.92	1.58	ND	ND	ND	0.52	0.32	ND	0.81	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988/02	1990/01	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RALEIGH-TILBURY EAST
 PLANT : MERLIN PV LAGOON
 WORKS NUMBER : 110000935
 TREATMENT : CONVENTIONAL LAGOON ANNUAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.46 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : KENT
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : FOXTON DR.- JEANETTES CK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 523

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.16	0.16	0.15	0.17	0.20	0.20	0.16	0.15	0.16	0.16	0.17	0.16	0.17	
LAGOON DISCHARGE	ND	ND	ND	6.08	ND	ND	ND	ND	ND	ND	24.36	ND	15.22	
BOD5														
INFLUENT (MG/L)	264.0	306.0	315.0	81.0	58.0	43.0	106.0	141.0	224.0	512.0	217.0	328.0	216.3	
EFFLUENT (MG/L)	ND	ND	ND	23.2	ND	ND	ND	ND	ND	ND	8.1	ND	15.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	3.94	ND	ND	ND	ND	ND	ND	1.37	ND	2.67	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	481.0	447.0	321.0	53.0	39.0	43.0	98.0	86.0	217.0	660.0	158.0	204.0	233.9	
EFFLUENT (MG/L)	ND	ND	ND	126.0	ND	ND	ND	ND	ND	ND	61.1	ND	93.6*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	21.42	ND	ND	ND	ND	ND	ND	10.38	ND	15.91	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.5	6.0	9.2	4.8	4.1	3.7	6.3	5.1	8.3	13.9	7.4	11.1	7.2	
EFFLUENT (MG/L)	ND	ND	ND	0.8	ND	ND	ND	ND	ND	ND	0.5	ND	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	ND	ND	ND	0.13	ND	ND	ND	ND	ND	ND	0.08	ND	0.12	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988/02	1990/01	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RIDGETOWN
 PLANT : RIDGETOWN LAGOON
 WORKS NUMBER : 110001364
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.33 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : KENT
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : GAWNE DR TO MCGREGOR CK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,152

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.98	0.98	1.03	1.12	1.15	1.25	1.11	1.03	1.08	1.11	1.18	1.13	1.10	
LAGOON DISCHARGE	ND	ND	ND	ND	184.89	ND	ND	ND	ND	90.35	ND	ND	137.62	
BOD5														
INFLUENT (MG/L)	132.0	108.0	176.0	150.0	117.0	128.0	106.0	288.0	158.0	140.0	120.0	182.0	150.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	26.8	ND	ND	ND	ND	5.7	ND	ND	16.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	30.82	ND	ND	ND	ND	6.32	ND	ND	17.93	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	243.0	153.0	229.0	180.0	200.0	194.0	296.0	221.0	211.0	202.0	129.0	129.0	198.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	70.4	ND	ND	ND	ND	22.4	ND	ND	46.4*	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	80.96	ND	ND	ND	ND	24.86	ND	ND	51.04	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.8	8.1	9.5	9.4	8.3	5.9	6.6	7.3	8.1	8.5	6.6	7.3	7.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	1.1*	ND	ND	ND	ND	1.5*	ND	ND	1.3	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	1.26	ND	ND	ND	ND	1.66	ND	ND	1.43	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	NO
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - PROCESS CONTROL BEING UPGRADED

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989	1990/01	1990/04
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RODNEY
 PLANT : RODNEY LAGOON
 WORKS NUMBER : 110001667
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.54 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ELGIN
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : SIXTEEN MILE CK.
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,027

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.35	0.34	0.34	0.38	0.37	0.44	0.39	0.38	0.36	0.36	0.41	0.28	0.37	
LAGOON DISCHARGE	ND	ND	ND	91.12	ND	ND	ND	ND	ND	135.96	ND	ND	113.54	
BOD5														
INFLUENT (MG/L)	828.0	82.0	125.0	135.0	170.0	76.0	296.0	59.0	104.0	435.0	556.0	436.0	275.2	
EFFLUENT (MG/L)	ND	ND	ND	22.2	ND	ND	ND	ND	ND	12.0	ND	ND	17.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	8.43	ND	ND	ND	ND	ND	4.32	ND	ND	6.33	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	382.0	27.0	69.0	69.0	88.0	35.0	116.0	45.0	38.0	235.0	255.0	263.0	135.2	
EFFLUENT (MG/L)	ND	ND	ND	38.5	ND	ND	ND	ND	ND	24.1	ND	ND	31.3*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	14.63	ND	ND	ND	ND	ND	8.67	ND	ND	11.58	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	11.1	2.7	7.1	3.6	8.2	3.1	6.6	4.1	4.6	8.7	8.6	10.1	6.5	
EFFLUENT (MG/L)	ND	ND	ND	0.6	ND	ND	ND	ND	ND	0.4	ND	ND	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.22	ND	ND	ND	ND	ND	0.14	ND	ND	0.19	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988	1991/12	
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1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : ROMNEY TWP-WHEATLY VILL
 PLANT : WHEATLY WPCP
 WORKS NUMBER : 110003246
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 2.75 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : KENT
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE ERIE
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,328

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.78	0.64	0.78	1.30	1.31	1.04	0.91	0.90	1.02	1.05	1.02	0.82	0.96	
BOD5														
INFLUENT (MG/L)	172.0	213.0	183.0	355.0	437.0	309.0	324.0	643.0	465.0	805.0	381.0	292.0	381.6	
EFFLUENT (MG/L)	4.2	3.8	2.3	4.2	3.6	2.2	1.6	1.7	2.9	2.7	2.8	1.6	2.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.27	2.43	1.79	5.46	4.71	2.28	1.45	1.53	2.95	2.83	2.85	1.31	2.69	
LOADING LIMIT (KG/D)													68.80	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	204.0	200.0	301.0	347.0	298.0	211.0	295.0	360.0	375.0	252.0	195.0	154.0	266.0	
EFFLUENT (MG/L)	12.4	10.3	7.4	9.2	6.8	4.1	5.2	3.3	6.8	6.4	8.1	6.5	7.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.67	6.59	5.77	11.96	8.90	4.26	4.73	2.97	6.93	6.72	8.26	5.33	6.91	
LOADING LIMIT (KG/D)													68.80	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	10.1	9.8	8.3	12.3	10.9	11.3	11.9	10.6	12.0	20.2	9.7	10.9	11.5	
EFFLUENT (MG/L)	0.5	0.4	0.3	0.5	0.4	0.3	0.4	0.4	0.5	0.5	0.4	0.4	0.4	
CONCENTRATION LIMIT (MG/L)													1.0	
LOADING (KG/D)	0.39	0.25	0.23	0.65	0.52	0.31	0.36	0.36	0.51	0.52	0.40	0.32	0.38	
LOADING LIMIT (KG/D)													2.75	

SUMMARY

PARAM	CRITERIA	LOADING	COMPLIES WITH CONC	LOADING
BOD	25.0 MG/L	68.80 KG/D	YES	YES
SS	25.0 MG/L	68.80 KG/D	YES	YES
TP	1.0 MG/L	2.75 KG/D	YES	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988	1992/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ROMNEY TWP-WHEATLY VILL
 PLANT : WHEATLY WPCP
 WORKS NUMBER : 110003246
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 2.75 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : KENT
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE ERIE
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,328

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.78	0.64	0.78	1.30	1.31	1.04	0.91	0.90	1.02	1.05	1.02	0.82	0.96	
BOD5														
INFLUENT (MG/L)	172.0	213.0	183.0	355.0	437.0	309.0	324.0	643.0	465.0	805.0	381.0	292.0	381.6	
EFFLUENT (MG/L)	4.2	3.8	2.3	4.2	3.6	2.2	1.6	1.7	2.9	2.7	2.8	1.6	2.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.27	2.43	1.79	5.46	4.71	2.28	1.45	1.53	2.95	2.83	2.85	1.31	2.69	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	204.0	200.0	301.0	347.0	298.0	211.0	295.0	360.0	375.0	252.0	195.0	154.0	266.0	
EFFLUENT (MG/L)	12.4	10.3	7.4	9.2	6.8	4.1	5.2	3.3	6.8	6.4	8.1	6.5	7.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.67	6.59	5.77	11.96	8.90	4.26	4.73	2.97	6.93	6.72	8.26	5.33	6.91	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	10.1	9.8	8.3	12.3	10.9	11.3	11.9	10.6	12.0	20.2	9.7	10.9	11.5	
EFFLUENT (MG/L)	0.5	0.4	0.3	0.5	0.4	0.3	0.4	0.4	0.5	0.5	0.4	0.4	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.39	0.25	0.23	0.65	0.52	0.31	0.36	0.36	0.51	0.52	0.40	0.32	0.38	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988	1992/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SARNIA
 PLANT : SARNIA WPCP
 WORKS NUMBER : 120000907
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 65.91 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : LAMBTON
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : ST. CLAIR RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 64,475

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	34.19	32.47	37.19	38.68	36.53	39.03	ND	35.99	ND	ND	35.02	31.66	35.64	
<u>BOD5</u>														
INFLUENT (MG/L)	174.0	155.0	130.0	169.0	125.0	134.0	107.0	ND	104.0	174.0	178.0	199.0	149.9	
EFFLUENT (MG/L)	64.0	52.0	36.0	75.0	46.0	51.0	48.0	ND	43.0	68.0	76.0	98.0	59.7	
LOADING (KG/D)	2188.16	1688.44	1338.84	2901.00	1680.38	1990.53	ND	ND	ND	ND	2661.52	3102.68	2127.71	
PERCENT REMOVAL	63	66	72	56	63	62	55		59	61	57	51	60	
PERCENT REMOVAL LIMITS													50	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	146.0	169.0	152.0	132.0	146.0	107.0	94.0	125.0	127.0	177.0	177.0	252.0	150.3	
EFFLUENT (MG/L)	27.0	24.0	22.0	19.0	24.0	19.0	20.0	16.0	15.0	19.0	22.0	30.0	21.4	
LOADING (KG/D)	923.13	779.28	818.18	734.92	876.72	741.57	ND	575.84	ND	ND	770.44	949.80	762.70	
PERCENT REMOVAL	82	86	86	86	84	82	79	87	88	89	88	88	86	
PERCENT REMOVAL LIMITS													70	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	5.7	ND	ND	4.6	5.7	4.3	4.0	4.8	5.0	7.0	5.6	8.6	5.5	
EFFLUENT (MG/L)	1.1*	ND	ND	0.8	0.9	0.7	0.7	0.7	0.7	0.8	0.9	1.0	0.8	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	37.60	ND	ND	30.94	32.87	27.32	ND	25.19	ND	ND	31.51	31.66	28.51	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SEAFORTH
 PLANT : SEAFORTH LAGOON
 WORKS NUMBER : 110001177
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.01 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : HURON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : CRESSWELL CREEK
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,153

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.76	1.40	1.80	1.97	1.41	1.32	1.02	0.91	0.88	0.87	1.28	1.13	1.31	
LAGOON DISCHARGE	ND	39.20	55.78	46.54	ND	ND	ND	ND	ND	ND	47.54	ND	47.27	
BOD5														
INFLUENT (MG/L)	207.0	236.0	107.0	165.0	184.0	252.0	368.0	343.0	325.0	175.0	156.0	425.0	245.3	
EFFLUENT (MG/L)	ND	23.9	41.9	34.5	ND	ND	ND	ND	ND	2.7	12.4	ND	23.1	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	33.46	75.42	67.96	ND	ND	ND	ND	ND	2.34	15.87	ND	30.26	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	181.0	354.0	168.0	121.0	151.0	175.0	246.0	292.0	306.0	196.0	119.0	213.0	210.2	
EFFLUENT (MG/L)	ND	46.5	22.2	16.9	ND	ND	ND	ND	ND	3.3	14.3	ND	20.6	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	65.10	39.96	33.29	ND	ND	ND	ND	ND	2.87	18.30	ND	26.99	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.2	5.0	3.6	3.0	4.6	4.3	6.5	7.3	7.2	6.4	3.3	4.5	4.9	
EFFLUENT (MG/L)	ND	0.6	0.5	0.5	ND	ND	ND	ND	ND	0.4	0.4	ND	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	0.84	0.90	0.98	ND	ND	ND	ND	ND	0.34	0.51	ND	0.66	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

ANTICIPATED

<u>START DATE</u>	<u>END DATE</u>	<u>COMPLIANCE</u>
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1988	1991/12	
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REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SOMBRA
 PLANT : PORT LAMBTON LAGOON
 WORKS NUMBER : 110001694
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 1.08 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : LAMBTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MARSHY CK. TO ST. CLAIR R.
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 900

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.38	0.36	0.41	0.44	0.37	0.45	0.38	0.39	0.60	0.42	0.45	0.34	0.42	
LAGOON DISCHARGE	ND	ND	ND	84.68	ND	ND	ND	ND	ND	16.49	40.91	ND	47.36	
BOD5														
INFLUENT (MG/L)	ND	111.0	103.0	99.0	131.0	114.0	167.0	135.0	84.0	115.0	119.0	187.0	124.1	
EFFLUENT (MG/L)	ND	ND	ND	1.5	ND	ND	ND	ND	ND	0.3	3.0	ND	1.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	0.66	ND	ND	ND	ND	ND	0.12	1.35	ND	0.67	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	137.0	123.0	82.0	141.0	103.0	132.0	145.0	96.0	121.0	90.0	144.0	119.5	
EFFLUENT (MG/L)	ND	ND	ND	13.5	ND	ND	ND	ND	ND	3.9	13.7	ND	10.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	5.94	ND	ND	ND	ND	ND	1.63	6.16	ND	4.37	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	6.7	6.8	12.4	7.7	7.6	8.1	7.6	4.6	8.0	6.7	8.0	7.7	
EFFLUENT (MG/L)	ND	ND	ND	0.2	ND	ND	ND	ND	ND	0.1	0.2	ND	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.08	ND	ND	ND	ND	ND	0.04	0.09	ND	0.08	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988/02	1990/01	
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SOMBRA
 PLANT : SOMBRA LAGOON
 WORKS NUMBER : 110001685
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.96 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : LAMBTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : ST. CLAIR RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 641

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.19	0.17	0.22	0.21	0.18	0.20	0.17	0.16	0.24	0.18	0.20	0.17	0.19	
LAGOON DISCHARGE	ND	ND	ND	59.69	ND	ND	ND	ND	ND	ND	ND	ND	59.69	
BOD5														
INFLUENT (MG/L)	ND	127.0	106.0	69.0	200.0	103.0	132.0	258.0	106.0	238.0	96.0	109.0	140.4	
EFFLUENT (MG/L)	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	2.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	0.46	ND	ND	ND	ND	ND	ND	ND	ND	0.42	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	81.0	85.0	62.0	172.0	74.0	118.0	323.0	82.0	235.0	46.0	56.0	121.3	
EFFLUENT (MG/L)	ND	ND	ND	12.1	ND	ND	ND	ND	ND	ND	ND	ND	12.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	2.54	ND	ND	ND	ND	ND	ND	ND	ND	2.30	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	7.1	5.8	4.2	9.4	7.6	8.4	7.1	5.9	8.3	6.3	6.7	7.0	
EFFLUENT (MG/L)	ND	ND	ND	0.1	ND	ND	ND	ND	ND	ND	ND	ND	0.1	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.02	ND	ND	ND	ND	ND	ND	ND	ND	0.02	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988/02	1990/01	
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SOUTHAMPTON
 PLANT : SOUTHAMPTON WPCP
 WORKS NUMBER : 110001453
 TREATMENT : OXIDATION DITCH
 :
 :
 DESIGN CAPACITY : 3.04 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : BRUCE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : SAUGEEN R.
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,866

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.29	1.05	1.35	1.42	1.18	1.29	1.28	1.20	0.94	0.90	1.05	0.97	1.16	
BOD5														
INFLUENT (MG/L)	55.0	41.0	62.0	63.0	53.0	59.0	75.0	91.0	73.0	82.0	70.0	60.0	65.3	
EFFLUENT (MG/L)	4.4	3.7	4.5	3.5	4.6	4.0	2.0	2.0	1.4	2.7	4.3	3.7	3.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.67	3.88	6.07	4.97	5.42	5.16	2.56	2.40	1.31	2.43	4.51	3.58	3.94	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	133.0	74.0	108.0	98.0	66.0	67.0	120.0	134.0	95.0	146.0	108.0	125.0	106.2	
EFFLUENT (MG/L)	6.4	3.9	4.6	5.7	8.4	3.6	3.9	2.1	2.4	2.8	7.7	5.2	4.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8.25	4.09	6.21	8.09	9.91	4.64	4.99	2.52	2.25	2.52	8.08	5.04	5.45	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.3	3.5	3.5	2.7	3.2	4.3	5.7	5.4	5.1	4.0	3.8	3.3	4.0	
EFFLUENT (MG/L)	2.1	2.6	1.7	1.9	3.2	3.3	4.1	3.9	3.2	4.2	3.5	2.4	3.0	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.70	2.73	2.29	2.69	3.77	4.25	5.24	4.68	3.00	3.78	3.67	2.32	3.48	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

SLUDGE DISPOSAL/REMOVAL - UPGRADING SLUDGE STORAGE FACILITIES

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988	1991/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ST EDMUNDS
 PLANT : TOBERMORY LAGOON
 WORKS NUMBER : 120001577
 TREATMENT : AERATED CELL PLUS LAGOON
 : EXFILTRATION LAGOON
 :
 DESIGN CAPACITY : 0.16 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : BRUCE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : NO DISC.TO SURFACE WATER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 300

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:

BOD - HAS NO CRITERIA
 SS - HAS NO CRITERIA
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ST MARYS
 PLANT : ST MARYS WPCP
 WORKS NUMBER : 110001275
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 3.63 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : PERTH
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : THAMES RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,568

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.80	4.46	5.16	5.34	4.48	4.59	ND	4.01	3.89	3.86	4.18	4.26	4.46	
BOD5														
INFLUENT (MG/L)	185.0	324.0	268.0	156.0	186.0	240.0	ND	178.0	222.0	211.0	164.0	143.0	207.0	
EFFLUENT (MG/L)	21.6	5.4	5.1	10.1	4.5	12.4	ND	6.8	3.4	3.0	12.0	4.2	8.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	103.68	24.08	26.31	53.93	20.16	56.91	ND	27.26	13.22	11.58	50.16	17.89	35.68	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	308.0	323.0	179.0	111.0	136.0	226.0	ND	161.0	162.0	131.0	96.0	143.0	179.6	
EFFLUENT (MG/L)	8.1	3.8	6.2	14.4	6.9	11.3	ND	8.7	6.7	8.5	6.4	9.1	8.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	38.88	16.94	31.99	76.89	30.91	51.86	ND	34.88	26.06	32.81	26.75	38.76	36.57	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.7	8.7	6.7	4.9	6.7	7.1	ND	5.7	7.7	6.7	5.6	5.7	6.6	
EFFLUENT (MG/L)	0.7	0.4	0.4	0.3	0.2	0.6	ND	0.3	0.3	0.4	0.4	0.4	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	3.36	1.78	2.06	1.60	0.89	2.75	ND	1.20	1.16	1.54	1.67	1.70	1.78	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - CONSTRUCTION COMPLETE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988	1990/02	
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1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : ST THOMAS
 PLANT : ST THOMAS WPCP
 WORKS NUMBER : 120001112
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 40.91 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ELGIN
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : KETTLE CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 28,218

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	16.89	16.28	20.46	17.16	19.70	15.25	14.96	13.64	12.61	14.70	12.46	15.83	
BOD5														
INFLUENT (MG/L)	107.0	176.0	113.0	113.0	136.0	51.0	55.0	86.0	113.0	1,436.0	105.0	75.0	213.8	
EFFLUENT (MG/L)	9.3	26.1	10.9	7.4	4.8	3.5	4.4	2.1	3.4	2.4	3.8	3.7	6.8	
CONCENTRATION LIMIT (MG/L)													15.0	
LOADING (KG/D)	ND	440.82	177.45	151.40	82.36	68.95	67.10	31.41	46.37	30.26	55.86	46.10	107.64	
LOADING LIMIT (KG/D)														
SUSPENDED SOLIDS														
INFLUENT (MG/L)	126.0	504.0	92.0	165.0	123.0	40.0	59.0	133.0	159.0	3,865.0	93.0	38.0	449.8	
EFFLUENT (MG/L)	8.4	19.4	19.9	7.6	3.8	4.8	4.7	4.2	4.9	6.4	3.2	3.7	7.6	
CONCENTRATION LIMIT (MG/L)													20.0	
LOADING (KG/D)	ND	327.66	323.97	155.49	65.20	94.56	71.67	62.83	66.83	80.70	47.04	46.10	120.31	
LOADING LIMIT (KG/D)														
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.9	22.0	6.5	4.6	5.2	4.3	5.2	5.2	6.2	52.5	6.0	4.6	10.7	
EFFLUENT (MG/L)	0.8	1.0	1.0	0.8	1.1	0.8	1.0	1.2	1.0	1.1	1.0	0.7	1.0	
CONCENTRATION LIMIT (MG/L)													1.0	
LOADING (KG/D)	ND	16.89	16.28	16.36	18.87	15.76	15.25	17.95	13.64	13.87	14.70	8.72	15.83	
LOADING LIMIT (KG/D)														

SUMMARY

PARAM	CRITERIA	LOADING	COMPLIES WITH CONC	LOADING
BOD	15.0 MG/L	NA	YES	NA
SS	20.0 MG/L	NA	YES	NA
TP	1.0 MG/L	NA	YES	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

SLUDGE DISPOSAL/REMOVAL - UPGRADING WASTE DISPOSAL SITE

START DATE END DATE ANTICIPATED
 COMPLIANCE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ST THOMAS
 PLANT : ST THOMAS WPCP
 WORKS NUMBER : 120001112
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 40.91 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ELGIN
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : KETTLE CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 28,218

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	16.89	16.28	20.46	17.16	19.70	15.25	14.96	13.64	12.61	14.70	12.46	15.83	
<u>BOD5</u>														
INFLUENT (MG/L)	107.0	176.0	113.0	113.0	136.0	51.0	55.0	86.0	113.0	1,436.0	105.0	75.0	213.8	
EFFLUENT (MG/L)	9.3	26.1	10.9	7.4	4.8	3.5	4.4	2.1	3.4	2.4	3.8	3.7	6.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	440.82	177.45	151.40	82.36	68.95	67.10	31.41	46.37	30.26	55.86	46.10	107.64	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	126.0	504.0	92.0	165.0	123.0	40.0	59.0	133.0	159.0	3,865.0	93.0	38.0	449.8	
EFFLUENT (MG/L)	8.4	19.4	19.9	7.6	3.8	4.8	4.7	4.2	4.9	6.4	3.2	3.7	7.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	327.66	323.97	155.49	65.20	94.56	71.67	62.83	66.83	80.70	47.04	46.10	120.31	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	5.9	22.0	6.5	4.6	5.2	4.3	5.2	5.2	6.2	52.5	6.0	4.6	10.7	
EFFLUENT (MG/L)	0.8	1.0	1.0	0.8	1.1*	0.8	1.0	1.2*	1.0	1.1*	1.0	0.7	1.0	3
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	ND	16.89	16.28	16.36	18.87	15.76	15.25	17.95	13.64	13.87	14.70	8.72	15.83	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

SLUDGE DISPOSAL/REMOVAL - UPGRADING WASTE DISPOSAL SITE

START DATE END DATE ANTICIPATED
 COMPLIANCE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : STEPHEN
 PLANT : GRAND BEND LAGOON
 WORKS NUMBER : 110002452
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 1.89 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : HURON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : AUSABLE RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,310

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.70	0.69	0.56	0.90	1.07	1.35	1.79	1.64	1.15	0.96	0.90	0.73	1.04	
LAGOON DISCHARGE	ND	ND	ND	ND	189.95	ND	ND	ND	ND	90.47	ND	ND	140.21	
<u>BOD5</u>														
INFLUENT (MG/L)	117.0	101.0	141.0	86.0	ND	76.0	200.0	205.0	ND	404.0	70.0	89.0	148.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	6.9	ND	ND	ND	ND	5.5	ND	ND	6.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	7.38	ND	ND	ND	ND	5.28	ND	ND	6.45	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	208.0	67.0	193.0	63.0	ND	109.0	125.0	146.0	ND	117.0	63.0	43.0	113.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	50.8	ND	ND	ND	ND	22.6	ND	ND	36.7*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	54.35	ND	ND	ND	ND	21.69	ND	ND	38.17	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	6.0	5.3	5.4	5.1	ND	4.5	6.7	11.4	ND	5.6	3.7	4.2	5.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.2	ND	ND	ND	ND	0.2	ND	ND	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.21	ND	ND	ND	ND	0.19	ND	ND	0.21	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988/02	1990/01	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : STEPHEN
 PLANT : HURON PARK WPCP
 WORKS NUMBER : 110003488
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 :
 :
 :
 DESIGN CAPACITY : 1.81 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : HURON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : AUSABLE RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,400

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.28	1.11	1.41	1.45	1.12	1.05	0.92	0.88	0.89	1.13	1.65	1.23	1.18	
BOD5														
INFLUENT (MG/L)	92.0	81.0	85.0	97.0	64.0	40.0	57.0	63.0	83.0	76.0	83.0	69.0	74.2	
EFFLUENT (MG/L)	5.9	6.1	5.7	3.0	9.8	12.8	6.8	2.4	2.7	5.6	2.0	2.0	5.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.55	6.77	8.03	4.35	10.97	13.44	6.25	2.11	2.40	6.32	3.30	2.46	6.37	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	62.0	67.0	81.0	75.0	53.0	51.0	45.0	104.0	77.0	142.0	94.0	50.0	75.1	
EFFLUENT (MG/L)	5.8	6.1	4.9	3.0	7.4	11.3	11.3	5.8	5.9	5.8	3.6	6.3	6.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.42	6.77	6.90	4.35	8.28	11.86	10.39	5.10	5.25	6.55	5.94	7.74	7.55	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.0	2.8	2.8	2.8	2.6	3.3	3.1	3.0	3.7	3.7	3.1	3.6	3.1	
EFFLUENT (MG/L)	1.7	2.5	1.6	1.6	1.7	2.1	2.5	2.3	3.3	2.4	2.6	2.3	2.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.17	2.77	2.25	2.32	1.90	2.20	2.30	2.02	2.93	2.71	4.29	2.82	2.60	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : STRATFORD
 PLANT : STRATFORD WPCP
 WORKS NUMBER : 110000702
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 27.27 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : PERTH
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : AVON RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 26,078

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	23.62	20.08	26.25	27.86	21.15	24.19	17.16	17.08	16.90	17.53	25.42	17.96	21.27	
<u>BOD5</u>														
INFLUENT (MG/L)	80.0	97.0	51.0	73.0	91.0	63.0	77.0	78.0	97.0	117.0	80.0	90.0	82.8	
EFFLUENT (MG/L)	8.7	12.2	7.2	10.2	11.4	16.0	16.8	15.0	10.0	11.1	12.1	8.1	11.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	205.49	244.97	189.00	284.17	241.11	387.04	288.28	256.20	169.00	194.58	307.58	145.47	246.73	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	70.0	99.0	75.0	65.0	98.0	71.0	101.0	102.0	102.0	119.0	70.0	56.0	85.7	
EFFLUENT (MG/L)	2.6	2.8	6.3	1.8	3.5	3.7	3.2	2.7	2.3	3.0	2.4	3.7	3.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	61.41	56.22	165.37	50.14	74.02	89.50	54.91	46.11	38.87	52.59	61.00	66.45	68.06	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	4.0	5.7	2.8	4.7	4.8	4.1	5.0	5.0	5.7	5.5	4.0	5.2	4.7	
EFFLUENT (MG/L)	0.4	0.9	0.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.6	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	9.44	18.07	21.00	5.57	4.23	4.83	3.43	3.41	3.38	3.50	10.16	10.77	8.51	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988	1990/12	
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : STRATHROY
 PLANT : STRATHROY LAGOON
 WORKS NUMBER : 120000827
 TREATMENT : AERATED LAGOON
 : CONTINUOUS DISCHARGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 DESIGN CAPACITY : 5.18 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : MIDDLESEC
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : SYDENHAM RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 9,051

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.54	2.30	2.40	2.49	2.24	2.20	3.48	2.43	2.64	4.05	2.34	1.93	2.59	
LAGOON DISCHARGE	211.88	128.85	134.45	74.65	69.30	65.92	ND	ND	29.03	51.23	55.86	ND	91.24	
BOD5														
INFLUENT (MG/L)	109.0	124.0	115.0	90.0	150.0	129.0	92.0	113.0	217.0	144.0	104.0	156.0	128.6	
EFFLUENT (MG/L)	11.9	11.4	8.9	4.1	14.6	21.1	ND	ND	5.6	8.6	6.3	11.1	10.4	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	30.22	26.22	21.36	10.20	32.70	46.42	ND	ND	14.78	34.83	14.74	21.42	26.94	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	237.0	358.0	154.0	126.0	173.0	194.0	295.0	186.0	207.0	232.0	147.0	147.0	204.7	
EFFLUENT (MG/L)	23.3	14.3	8.1	8.4	26.3	50.6	ND	ND	15.3	10.5	6.7	7.0	17.1	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	59.18	32.89	19.44	20.91	58.91	111.32	ND	ND	40.39	42.52	15.67	13.51	44.29	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.3	6.1	5.6	4.7	5.8	6.3	5.4	5.5	9.9	6.2	5.7	7.8	6.2	
EFFLUENT (MG/L)	0.4	0.5	0.3	0.2	1.0	1.2*	ND	ND	1.3*	0.5	0.4	0.5	0.6	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.01	1.15	0.72	0.49	2.24	2.64	ND	ND	3.43	2.02	0.93	0.96	1.55	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

INFLUENT SEWAGE - ENFORCING SEWER USE BYLAW
 EQUIPMENT/MAINTENANCE - NEW EQUIPMENT BEING INSTALLED
 EQUIPMENT/MAINTENANCE - EXISTING EQUIPMENT BEING REPAIRED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989/04	1991	1991/06
1990/05	1990/07	1990/07
1988/09	1989/03	1989/03

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : THAMESVILLE
 PLANT : THAMESVILLE WPCP
 WORKS NUMBER : 110002470
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.81 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : KENT
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : THAMES RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 985

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.23	0.22	0.21	0.22	0.23	0.25	0.24	0.24	0.23	0.24	0.24	0.25	0.23	
BOD5														
INFLUENT (MG/L)	103.0	139.0	127.0	135.0	114.0	184.0	71.0	125.0	155.0	196.0	142.0	232.0	143.6	
EFFLUENT (MG/L)	12.7	5.9	6.3	4.0	4.5	2.3	1.3	4.2	2.8	2.1	2.8	4.3	4.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.92	1.29	1.32	0.88	1.03	0.57	0.31	1.00	0.64	0.50	0.67	1.07	1.01	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	75.0	120.0	107.0	89.0	92.0	98.0	85.0	110.0	148.0	143.0	79.0	55.0	100.1	
EFFLUENT (MG/L)	13.9	7.6	7.2	11.4	8.7	3.5	6.0	5.5	5.5	5.5	6.2	9.9	7.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.19	1.67	1.51	2.50	2.00	0.87	1.44	1.32	1.26	1.32	1.48	2.47	1.75	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.0	9.1	8.4	6.8	8.0	3.8	5.3	5.6	7.1	9.0	6.9	6.9	7.1	
EFFLUENT (MG/L)	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.6	0.6	0.7	0.7	0.5	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.11	0.11	0.08	0.08	0.09	0.10	0.09	0.14	0.13	0.16	0.16	0.12	0.12	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

EQUIPMENT/MAINTENANCE - NEW EQUIPMENT BEING INSTALLED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989/10	1989/11	1989/11

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : THEDFORD
 PLANT : THEDFORD LAGOON
 WORKS NUMBER : 110002336
 TREATMENT : CONVENTIONAL LAGOON ANNUAL
 :
 :
 DESIGN CAPACITY : 0.48 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : LAMBTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : DECKER CREEK
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 675

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.23	0.21	0.22	0.21	0.18	0.17	0.26	0.26	0.15	0.18	0.22	0.21	0.21	
LAGOON DISCHARGE	ND	ND	ND	ND	42.84	ND	ND	ND	ND	ND	ND	ND	42.84	
BOD5														
INFLUENT (MG/L)	99.0	88.0	116.0	70.0	ND	104.0	166.0	176.0	254.0	393.0	190.0	200.0	168.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	1.9	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	0.34	ND	ND	ND	ND	ND	ND	ND	0.40	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	113.0	55.0	60.0	115.0	ND	100.0	177.0	1,024.0	225.0	446.0	147.0	64.0	229.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND	ND	6.3	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	1.13	ND	ND	ND	ND	ND	ND	ND	1.32	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.4	5.2	6.5	5.0	ND	6.2	7.3	7.9	7.6	13.3	9.3	5.5	7.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	ND	ND	0.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.01	ND	ND	ND	ND	ND	ND	ND	0.02	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988/02	1990/01	
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : THORNBURY
 PLANT : THORNBURY LAGOON
 WORKS NUMBER : 110001890
 TREATMENT : AERATED CELL PLUS LAGOON
 : SUMMER STORAGE
 :
 DESIGN CAPACITY : 1.72 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : GREY
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BEAVER RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,764

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.59	1.26	1.87	1.78	1.68	1.71	1.28	1.15	1.07	1.08	1.25	1.26	1.42	
LAGOON DISCHARGE	49.27	35.13	59.17	126.73	147.93	ND	ND	ND	ND	33.51	37.42	39.19	66.04	
BOD5														
INFLUENT (MG/L)	119.0	99.0	60.0	88.0	252.0	38.0	24.0	54.0	14.0	32.0	37.0	25.0	70.2	
EFFLUENT (MG/L)	3.1	3.9	9.1	12.4	7.8	ND	ND	ND	ND	1.8	4.5	2.3	5.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	4.92	4.91	17.01	22.07	13.10	ND	ND	ND	ND	1.94	5.62	2.89	7.95	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	110.0	80.0	90.0	54.0	194.0	42.0	21.0	29.0	10.0	36.0	42.0	16.0	60.3	
EFFLUENT (MG/L)	2.3	7.1	7.4	29.0	17.8	ND	ND	ND	ND	2.9	6.4	3.4	9.5	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	3.65	8.94	13.83	51.62	29.90	ND	ND	ND	ND	3.13	8.00	4.28	13.49	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.1	2.9	3.5	ND	2.8	2.9	1.9	3.0	1.3	2.1	2.5	1.3	2.4	
EFFLUENT (MG/L)	1.7	1.8	1.9	1.6	1.7	ND	ND	ND	ND	2.9	0.8	0.9	1.7	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.70	2.26	3.55	2.84	2.85	ND	ND	ND	ND	3.13	1.00	1.13	2.41	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988	1991/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TILBURY
 PLANT : TILBURY LAGOON
 WORKS NUMBER : 120000916
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 2.53 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : KENT
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : TILBURY CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,200

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.16	4.07	5.00	5.46	6.46	4.00	4.02	4.02	ND	ND	ND	ND	4.65	
LAGOON DISCHARGE	130.00	114.00	193.00	385.00	539.00	ND	ND	ND	ND	ND	ND	ND	272.20	
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	INSUFFICIENT DATA
SS	40.0 MG/L	INSUFFICIENT DATA
TP	1.0 MG/L	INSUFFICIENT DATA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TILBURY NORTH
 PLANT : STONEY POINT P.V. LAGOON
 WORKS NUMBER : 110002345
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.95 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ESSEX
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LITTLE CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,305

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.74	0.58	0.62	0.88	0.71	1.17	1.10	0.69	0.58	0.53	0.60	0.49	0.72	
LAGOON DISCHARGE	ND	ND	ND	ND	226.94	ND	ND	ND	ND	ND	126.52	ND	176.73	
BOD5														
INFLUENT (MG/L)	39.0	65.0	67.0	38.0	40.0	33.0	19.0	36.0	64.0	70.0	83.0	73.0	52.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	8.2	ND	ND	ND	ND	ND	3.7	ND	6.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	5.82	ND	ND	ND	ND	ND	2.22	ND	4.32	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	52.0	71.0	46.0	29.0	34.0	51.0	26.0	31.0	61.0	53.0	70.0	31.0	46.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	34.1	ND	ND	ND	ND	ND	16.1	ND	25.1*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	24.21	ND	ND	ND	ND	ND	9.66	ND	18.07	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.0	4.7	3.0	3.1	2.2	2.4	1.8	3.6	4.5	4.1	5.0	4.4	3.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.4	ND	ND	ND	ND	ND	0.4	ND	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.28	ND	ND	ND	ND	ND	0.24	ND	0.29	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988/02	1990/01	
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TILBURY WEST
 PLANT : COMBER LAGOON
 WORKS NUMBER : 110001676
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.40 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ESSEX
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : GOVN'T DR NO.1 TO BIG CK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 780

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.35	0.29	0.35	0.46	0.34	0.39	0.37	0.25	0.27	0.29	0.30	0.27	0.33	
LAGOON DISCHARGE	ND	ND	ND	ND	80.95	ND	ND	ND	ND	ND	41.08	ND	61.02	
BOD5														
INFLUENT (MG/L)	73.0	116.0	118.0	71.0	177.0	105.0	117.0	158.0	123.0	107.0	390.0	127.0	140.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	6.5	ND	ND	ND	ND	ND	5.2	ND	5.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	2.21	ND	ND	ND	ND	ND	1.56	ND	1.95	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	93.0	118.0	103.0	56.0	142.0	163.0	133.0	142.0	114.0	90.0	495.0	44.0	141.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	6.0	ND	ND	ND	ND	ND	8.9	ND	7.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	2.04	ND	ND	ND	ND	ND	2.67	ND	2.48	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.2	7.5	6.4	4.5	8.8	8.0	7.8	7.8	7.4	6.2	12.1	5.6	7.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	0.3	ND	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.03	ND	ND	ND	ND	ND	0.09	ND	0.07	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988/02	1990/01	
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TILLSONBURG
 PLANT : TILLSONBURG WPCP
 WORKS NUMBER : 110000757
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 5.91 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : OXFORD
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BIG OTTER CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 11,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.43	4.20	4.25	4.69	4.45	4.51	4.18	4.22	4.34	4.22	4.62	4.13	4.35	
BOD5														
INFLUENT (MG/L)	137.0	113.0	115.0	149.0	143.0	144.0	138.0	101.0	121.0	151.0	123.0	167.0	133.5	
EFFLUENT (MG/L)	2.9	2.9	10.4	4.5	2.4	9.7	1.0	0.8	2.2	2.7	2.3	3.4	3.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	12.84	12.18	44.20	21.10	10.68	43.74	4.18	3.37	9.54	11.39	10.62	14.04	16.53	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	162.0	160.0	193.0	145.0	214.0	159.0	167.0	174.0	167.0	260.0	155.0	233.0	182.4	
EFFLUENT (MG/L)	9.5	10.4	11.7	9.9	9.4	5.6	5.2	3.9	5.7	6.3	5.8	8.8	7.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	42.08	43.68	49.72	46.43	41.83	25.25	21.73	16.45	24.73	26.58	26.79	36.34	33.50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.3	6.3	5.4	ND	6.4	7.6	7.3	7.9	6.9	8.3	7.3	6.8	7.1	
EFFLUENT (MG/L)	0.7	0.8	0.8	0.9	0.6	0.8	0.6	0.7	0.7	0.6	0.8	0.7	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	3.10	3.36	3.40	4.22	2.67	3.60	2.50	2.95	3.03	2.53	3.69	2.89	3.05	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TUCKERSMITH
 PLANT : VAN ASTRA WPCP
 WORKS NUMBER : 110003013
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.40 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : HURON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MUN DRAIN TO BAYFIELD R.
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 770

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.88	0.58	0.86	0.84	0.68	0.61	0.43	0.40	0.42	0.51	0.86	0.59	0.64	
BOD5														
INFLUENT (MG/L)	40.0	110.0	74.0	39.0	74.0	70.0	109.0	151.0	199.0	59.0	44.0	71.0	86.7	
EFFLUENT (MG/L)	7.1	4.4	3.6	4.3	2.5	3.8	2.2	0.1	2.6	1.8	9.3	8.9	4.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.24	2.55	3.09	3.61	1.70	2.31	0.94	0.04	1.09	0.91	7.99	5.25	2.69	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	49.0	132.0	90.0	39.0	67.0	110.0	120.0	243.0	380.0	77.0	40.0	61.0	117.3	
EFFLUENT (MG/L)	12.2	5.2	6.4	10.0	4.1	8.6	5.1	3.8	4.9	4.6	18.5	14.1	8.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.73	3.01	5.50	8.40	2.78	5.24	2.19	1.52	2.05	2.34	15.91	8.31	5.18	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.1	4.7	4.2	2.9	3.8	4.9	5.3	6.7	8.6	3.4	2.7	4.2	4.5	
EFFLUENT (MG/L)	0.5	0.2	0.3	0.4	0.3	0.3	0.2	0.1	0.2	0.2	0.7	0.5	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.44	0.11	0.25	0.33	0.20	0.18	0.08	0.04	0.08	0.10	0.60	0.29	0.19	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW

START DATE END DATE ANTICIPATED
 COMPLIANCE

1990/01 1992/12

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WALKERTON
 PLANT : WALKERTON WPCP
 WORKS NUMBER : 120001489
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 7.54 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : BRUCE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : SAUGEEN RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,591

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.50	4.87	6.54	5.99	5.22	5.43	4.66	4.21	4.33	5.16	6.12	5.91	5.25	
BOD5														
INFLUENT (MG/L)	195.0	189.0	184.0	195.0	358.0	230.0	355.0	298.0	329.0	277.0	252.0	364.0	268.8	
EFFLUENT (MG/L)	5.9	9.0	8.8	12.7	13.4	8.0	4.7	4.6	4.9	7.9	7.0	5.8	7.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	26.55	43.83	57.55	76.07	69.94	43.44	21.90	19.36	21.21	40.76	42.84	34.27	40.43	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	182.0	166.0	128.0	122.0	156.0	150.0	295.0	208.0	270.0	149.0	241.0	142.0	184.1	
EFFLUENT (MG/L)	8.4	11.0	9.2	6.4	10.1	5.3	7.7	7.7	4.3	6.3	7.0	5.8	7.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	37.80	53.57	60.16	38.33	52.72	28.77	35.88	32.41	18.61	32.50	42.84	34.27	38.85	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.0	6.7	4.3	5.7	6.2	6.2	7.1	7.2	7.9	6.6	6.3	6.1	6.4	
EFFLUENT (MG/L)	0.9	1.0	1.0	1.0	0.8	0.7	0.6	0.7	0.8	0.7	0.7	1.0	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	4.05	4.87	6.54	5.99	4.17	3.80	2.79	2.94	3.46	3.61	4.28	5.91	4.20	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WALLACEBURG
 PLANT : WALLACEBURG WPCP
 WORKS NUMBER : 110000784
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 6.81 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : KENT
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : SYDENHAM RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 10,056

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.72	5.93	6.36	7.18	6.48	7.34	5.94	5.85	6.86	6.54	7.86	6.01	6.51	
BOD5														
INFLUENT (MG/L)	85.0	98.0	105.0	98.0	101.0	97.0	74.0	98.0	91.0	91.0	93.0	83.0	92.8	
EFFLUENT (MG/L)	7.4	6.5	11.7	8.8	12.3	13.9	4.0	13.0	11.2	7.2	9.1	12.6	9.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	42.32	38.54	74.41	63.18	79.70	102.02	23.76	76.05	76.83	47.08	71.52	75.72	63.80	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	241.0	264.0	211.0	218.0	230.0	146.0	120.0	151.0	202.0	109.0	180.0	201.0	189.4	
EFFLUENT (MG/L)	9.7	9.8	6.3	8.8	14.9	13.5	4.9	7.3	4.1	4.7	4.2	17.5	8.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	55.48	58.11	40.06	63.18	96.55	99.09	29.10	42.70	28.12	30.73	33.01	105.17	57.29	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.6	4.2	9.1	8.3	4.5	4.3	3.9	5.5	5.5	5.8	4.4	5.2	5.5	
EFFLUENT (MG/L)	0.4	0.4	1.9*	0.8	0.5	0.8	0.4	0.6	0.5	0.9	0.6	1.6*	0.8	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.28	2.37	12.08	5.74	3.24	5.87	2.37	3.51	3.43	5.88	4.71	9.61	5.21	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - ENFORCING SEWER-USE BYLAWS
 FACILITY EXPANSION/UPGRADING - APPLICATION FOR FUNDING

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989	1990/12	1990/01
1988	1992/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WATFORD
 PLANT : WATFORD LAGOON
 WORKS NUMBER : 110001809
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 1.05 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : LAMBTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BEAR CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,467

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.53	0.48	0.55	0.56	0.49	0.51	0.44	0.46	0.54	0.53	0.65	0.54	0.52	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	88.0	119.0	138.0	167.0	144.0	151.0	158.0	176.0	178.0	170.0	184.0	154.0	152.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	3.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.80	ND	ND	1.77	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	83.0	83.0	90.0	125.0	124.0	103.0	60.0	110.0	158.0	92.0	86.0	72.0	98.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.8	ND	ND	10.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.72	ND	ND	5.62	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.1	6.9	7.5	6.5	6.5	6.6	6.5	6.3	ND	6.4	7.3	8.5	6.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6	ND	ND	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31	ND	ND	0.31	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE END DATE ANTICIPATED
 COMPLIANCE

1988/02 1990/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WEST LORNE
 PLANT : WEST LORNE LAGOON
 WORKS NUMBER : 110001337
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.67 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ELGIN
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : ZOLLER DRAIN
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,367

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.58	ND	0.60	0.62	0.53	0.66	0.49	0.44	0.48	0.49	0.56	0.47	0.54	
LAGOON DISCHARGE	ND	ND	ND	78.90	ND	ND	ND	ND	ND	104.35	ND	ND	91.63	
BOD5														
INFLUENT (MG/L)	162.0	122.0	246.0	112.0	208.0	126.0	138.0	126.0	101.0	136.0	152.0	150.0	148.3	
EFFLUENT (MG/L)	ND	ND	ND	9.2	ND	ND	ND	ND	ND	3.8	ND	ND	6.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	5.70	ND	ND	ND	ND	ND	1.86	ND	ND	3.51	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	144.0	88.0	266.0	98.0	13.0	107.0	111.0	101.0	186.0	103.0	148.0	93.0	121.5	
EFFLUENT (MG/L)	ND	ND	ND	16.1	ND	ND	ND	ND	ND	12.9	ND	ND	14.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	9.98	ND	ND	ND	ND	ND	6.32	ND	ND	7.83	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.8	5.5	10.5	2.3	3.6	6.2	6.7	6.7	8.0	5.8	5.3	6.7	6.3	
EFFLUENT (MG/L)	ND	ND	ND	0.3	ND	ND	ND	ND	ND	0.2	ND	ND	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.18	ND	ND	ND	ND	ND	0.09	ND	ND	0.16	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988/02	1990/01	
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WESTMINSTER
 PLANT : SOUTHLAND PARK WPCP
 WORKS NUMBER : 120000818
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.26 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : MIDDLESEC
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : DINGMAN CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 400

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.09	
BOD5														
INFLUENT (MG/L)	112.0	105.0	106.0	143.0	126.0	107.0	123.0	132.0	103.0	109.0	75.0	108.0	112.4	
EFFLUENT (MG/L)	1.1	2.8	1.5	2.5	2.4	1.8	2.3	1.2	1.4	3.5	6.1	3.1	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.09	0.25	0.13	0.22	0.21	0.16	0.20	0.10	0.12	0.31	0.54	0.24	0.23	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	93.0	111.0	112.0	165.0	196.0	117.0	142.0	165.0	218.0	211.0	67.0	64.0	138.4	
EFFLUENT (MG/L)	0.5	2.4	1.6	4.8	3.8	2.5	1.5	1.8	1.6	4.7	7.2	4.4	3.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.04	0.21	0.14	0.43	0.34	0.22	0.13	0.16	0.14	0.42	0.64	0.35	0.28	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	9.1	6.9	10.2	5.3	8.0	4.6	7.9	5.8	6.8	6.6	6.6	4.9	6.9	
EFFLUENT (MG/L)	0.4	0.3	0.4	0.3	0.7	0.7	0.8	0.6	0.6	0.4	0.7	0.3	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.03	0.02	0.03	0.02	0.06	0.06	0.07	0.05	0.05	0.03	0.06	0.02	0.05	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - PRELIMINARY DESIGN PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989	1992/12	
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WESTMINSTER
 PLANT : WESTMINSTER WPCP
 WORKS NUMBER : 110000800
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.13 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : MIDDLESEC
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : DINGMAN CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 6,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.84	1.67	1.80	2.00	1.84	2.21	2.15	2.02	1.10	1.31	1.35	1.28	1.71	
BOD5														
INFLUENT (MG/L)	96.0	146.0	142.0	72.0	101.0	100.0	145.0	208.0	146.0	94.0	173.0	129.0	129.3	
EFFLUENT (MG/L)	5.0	7.7	10.5	9.1	7.5	7.9	8.3	6.6	6.0	3.2	9.0	4.8	7.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.20	12.85	18.90	18.20	13.80	17.45	17.84	13.33	6.60	4.19	12.15	6.14	12.14	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	175.0	187.0	112.0	52.0	116.0	88.0	130.0	154.0	181.0	79.0	160.0	75.0	125.8	
EFFLUENT (MG/L)	4.4	4.8	5.3	4.4	2.7	6.3	9.4	6.0	5.2	6.5	7.2	7.4	5.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8.09	8.01	9.54	8.80	4.96	13.92	20.21	12.12	5.72	8.51	9.72	9.47	9.92	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.0	6.4	3.7	3.3	4.0	4.4	5.5	8.4	6.7	5.2	5.9	5.6	5.3	
EFFLUENT (MG/L)	0.3	0.3	0.2	0.3	0.6	0.5	0.7	0.6	0.6	0.2	0.2	0.2	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.55	0.50	0.36	0.60	1.10	1.10	1.50	1.21	0.66	0.26	0.27	0.25	0.68	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WIARTON
 PLANT : WIARTON LAGOON
 WORKS NUMBER : 110000819
 TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 2.00 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : BRUCE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : COLPOY BAY
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,119

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.19	1.56	2.49	2.30	1.66	1.63	1.28	1.43	1.56	1.57	2.41	1.86	1.83	
LAGOON DISCHARGE	67.81	43.59	77.32	68.84	51.35	48.88	39.73	44.24	46.82	48.76	72.24	57.79	55.61	
BOD5														
INFLUENT (MG/L)	64.0	78.0	58.0	74.0	78.0	72.0	96.0	103.0	88.0	89.0	44.0	67.0	75.9	
EFFLUENT (MG/L)	7.5	8.9	8.0	26.2	7.7	11.9	9.8	3.9	2.7	7.7	11.4	8.8	9.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	16.42	13.88	19.92	60.26	12.78	19.39	12.54	5.57	4.21	12.08	27.47	16.36	17.39	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	64.0	95.0	47.0	68.0	69.0	90.0	100.0	97.0	82.0	79.0	33.0	46.0	72.5	
EFFLUENT (MG/L)	3.0	6.4	6.0	29.9	13.2	9.2	7.0	6.4	9.3	12.7	14.2	11.3	10.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	6.57	9.98	14.94	68.77	21.91	14.99	8.96	9.15	14.50	19.93	34.22	21.01	19.58	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.9	5.0	2.4	3.5	4.4	4.6	4.9	4.0	4.8	4.4	2.2	3.3	3.9	
EFFLUENT (MG/L)	0.4	0.2	0.3	0.4	0.6	0.5	0.6	0.5	0.5	0.2	0.4	0.3	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.87	0.31	0.74	0.92	0.99	0.81	0.76	0.71	0.78	0.31	0.96	0.55	0.73	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW

START DATE	END DATE	ANTICIPATED COMPLIANCE
1990/01	1992/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WINDSOR
 PLANT : LITTLE RIVER WPCP
 WORKS NUMBER : 120001096
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 36.36 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ESSEX
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LITTLE RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 64,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	40.38	32.10	33.30	39.60	38.40	44.00	46.00	37.60	39.50	32.90	36.40	32.50	37.72	
BOD5														
INFLUENT (MG/L)	159.0	194.0	148.0	153.0	186.0	136.0	162.0	149.0	179.0	201.0	166.0	153.0	165.5	
EFFLUENT (MG/L)	8.0	14.0	13.0	6.0	9.0	6.0	6.0	5.0	5.0	4.0	6.0	13.0	7.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	323.04	449.40	432.90	237.60	345.60	264.00	276.00	188.00	197.50	131.60	218.40	422.50	297.99	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	181.0	222.0	199.0	240.0	316.0	199.0	286.0	290.0	362.0	277.0	225.0	177.0	247.8	
EFFLUENT (MG/L)	9.0	10.0	6.0	6.0	8.0	7.0	8.0	10.0	6.0	8.0	9.0	8.0	7.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	363.42	321.00	199.80	237.60	307.20	308.00	368.00	376.00	237.00	263.20	327.60	260.00	297.99	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.8	7.0	5.8	6.4	7.3	6.0	6.7	7.0	8.0	8.9	6.6	6.3	6.8	
EFFLUENT (MG/L)	0.4	0.4	0.2	0.2	0.4	0.4	0.6	0.7	0.2	0.4	0.4	0.3	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	16.15	12.84	6.66	7.92	15.36	17.60	27.60	26.32	7.90	13.16	14.56	9.75	15.09	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED

START DATE END DATE ANTICIPATED
 COMPLIANCE

1985/05 1990/06

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WINDSOR
 PLANT : WESTERLY WPCP
 WORKS NUMBER : 120001103
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 163.65 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : ESSEX
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : DETROIT RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 123,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	109.10	102.70	111.70	131.60	112.60	145.10	129.50	118.30	129.40	112.70	117.00	90.40	117.51	
BOD5														
INFLUENT (MG/L)	85.0	101.0	104.0	89.0	130.0	73.0	66.0	68.0	85.0	98.0	112.0	132.0	95.3	
EFFLUENT (MG/L)	33.0	41.0	34.0	35.0	43.0	29.0	29.0	30.0	44.0	57.0	44.0	50.0	39.1	
LOADING (KG/D)	3600.30	4210.70	3797.80	4606.00	4841.80	4207.90	3755.50	3549.00	5693.60	6423.90	5148.00	4520.00	4594.64	
PERCENT REMOVAL	61	59	67	61	67	60	56	56	48	42	61	62	59	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	95.0	128.0	151.0	104.0	183.0	118.0	95.0	99.0	81.0	124.0	130.0	180.0	124.0	
EFFLUENT (MG/L)	24.0	20.0	26.0	19.0	23.0	20.0	23.0	25.0	23.0	27.0	28.0	34.0	24.3	
LOADING (KG/D)	2618.40	2054.00	2904.20	2500.40	2589.80	2902.00	2978.50	2957.50	2976.20	3042.90	3276.00	3073.60	2855.49	
PERCENT REMOVAL	75	84	83	82	87	83	76	75	72	78	78	81	80	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.9	4.9	4.3	3.2	4.6	3.6	3.0	3.6	3.5	3.8	4.0	5.0	4.0	
EFFLUENT (MG/L)	0.6	0.7	0.7	0.4	0.9	0.5	0.5	0.7	0.7	0.8	0.6	1.1*	0.7	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	65.46	71.89	78.19	52.64	101.34	72.55	64.75	82.81	90.58	90.16	70.20	99.44	82.26	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WINGHAM
 PLANT : WINGHAM LAGOON
 WORKS NUMBER : 110000828
 TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
 :
 :
 DESIGN CAPACITY : 1.60 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : HURON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MAITLAND RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,941

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.89	2.08	2.28	2.28	1.85	2.13	1.65	1.60	1.33	1.37	1.54	1.55	1.96	
LAGOON DISCHARGE	120.56	58.21	70.72	123.92	45.73	63.83	51.21	49.47	39.77	42.55	46.13	48.15	63.35	
BOD5														
INFLUENT (MG/L)	87.0	80.0	82.0	111.0	115.0	74.0	153.0	102.0	204.0	124.0	89.0	306.0	127.3	
EFFLUENT (MG/L)	18.9	24.2	22.9	22.4	13.1	22.8	19.3	22.1	19.1	17.5	14.6	15.9	19.4	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	73.52	50.33	52.21	51.07	24.23	48.56	31.84	35.36	25.40	23.97	22.48	24.64	38.02	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	118.0	95.0	54.0	51.0	62.0	59.0	74.0	120.0	167.0	104.0	53.0	123.0	90.0	
EFFLUENT (MG/L)	9.3	10.4	8.6	10.3	16.2	28.6	50.9	30.7	36.7	39.6	23.3	20.1	23.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	36.17	21.63	19.60	23.48	29.97	60.91	83.98	49.12	48.81	54.25	35.88	31.15	46.45	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.9	5.2	4.0	3.9	4.2	4.2	4.4	4.7	10.4	6.6	4.5	7.0	5.3	
EFFLUENT (MG/L)	2.3	2.9	2.6	2.5	2.2	2.7	3.3	3.2	3.7	3.2	2.4	3.6	2.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	8.94	6.03	5.92	5.70	4.07	5.75	5.44	5.12	4.92	4.38	3.69	5.58	5.68	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE
 FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988	1992/12	
1988	1990/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WOODSTOCK
 PLANT : WOODSTOCK WPCP
 WORKS NUMBER : 120000685
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 32.27 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : OXFORD
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : THAMES RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 27,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	19.17	17.47	18.52	20.99	19.44	19.96	16.91	16.82	16.23	16.80	19.28	19.13	18.39	
BOD5														
INFLUENT (MG/L)	84.0	91.0	93.0	96.0	100.0	98.0	123.0	156.0	129.0	133.0	104.0	116.0	110.3	
EFFLUENT (MG/L)	6.7	6.0	6.9	9.0	8.5	8.5	6.8	8.0	8.9	6.7	6.5	11.9	7.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	128.43	104.82	127.78	188.91	165.24	169.66	114.98	134.56	144.44	112.56	125.32	227.64	145.28	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	169.0	257.0	210.0	199.0	179.0	172.0	182.0	272.0	234.0	231.0	246.0	174.0	210.4	
EFFLUENT (MG/L)	6.9	7.1	8.6	9.3	8.8	5.7	6.5	8.8	5.3	7.2	7.4	6.6	7.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	132.27	124.03	159.27	195.20	171.07	113.77	109.91	148.01	86.01	120.96	142.67	126.25	136.09	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.6	5.0	5.9	6.1	5.8	4.6	6.5	4.4	7.3	7.2	6.4	5.8	5.8	
EFFLUENT (MG/L)	0.6	0.9	0.8	0.7	0.6	0.8	0.9	0.6	0.8	0.8	0.6	0.6	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	11.50	15.72	14.81	14.69	11.66	15.96	15.21	10.09	12.98	13.44	11.56	11.47	12.87	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - PROCESS CONTROL BEING UPGRADED

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1990/03	1990/04	1990/05
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ZURICH
 PLANT : ZURICH LAGOON
 WORKS NUMBER : 110001444
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 DESIGN CAPACITY : 0.44 (1000 M3)

REGION : SOUTHWEST
 DISTRICT : HURON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MUN DRAIN TO L. HURON
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 920

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.49	0.51	0.57	0.57	0.51	0.44	0.48	0.44	0.43	0.38	0.40	0.37	0.47	
LAGOON DISCHARGE	ND	ND	ND	ND	84.18	ND	ND	ND	ND	36.30	ND	ND	60.24	
BOD5														
INFLUENT (MG/L)	94.0	144.0	104.0	67.0	ND	111.0	100.0	197.0	162.0	143.0	117.0	107.0	122.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	1.9	ND	ND	ND	ND	3.2	ND	ND	2.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	0.96	ND	ND	ND	ND	1.21	ND	ND	1.22	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	111.0	221.0	163.0	76.0	ND	86.0	140.0	240.0	193.0	159.0	104.0	55.0	140.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	13.8	ND	ND	ND	ND	14.1	ND	ND	14.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	7.03	ND	ND	ND	ND	5.35	ND	ND	6.58	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	9.6	5.6	3.6	ND	4.6	7.3	9.3	8.3	9.3	4.8	4.9	6.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.1	ND	ND	ND	ND	0.1	ND	ND	0.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.05	ND	ND	ND	ND	0.03	ND	ND	0.05	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988/02	1990/01	
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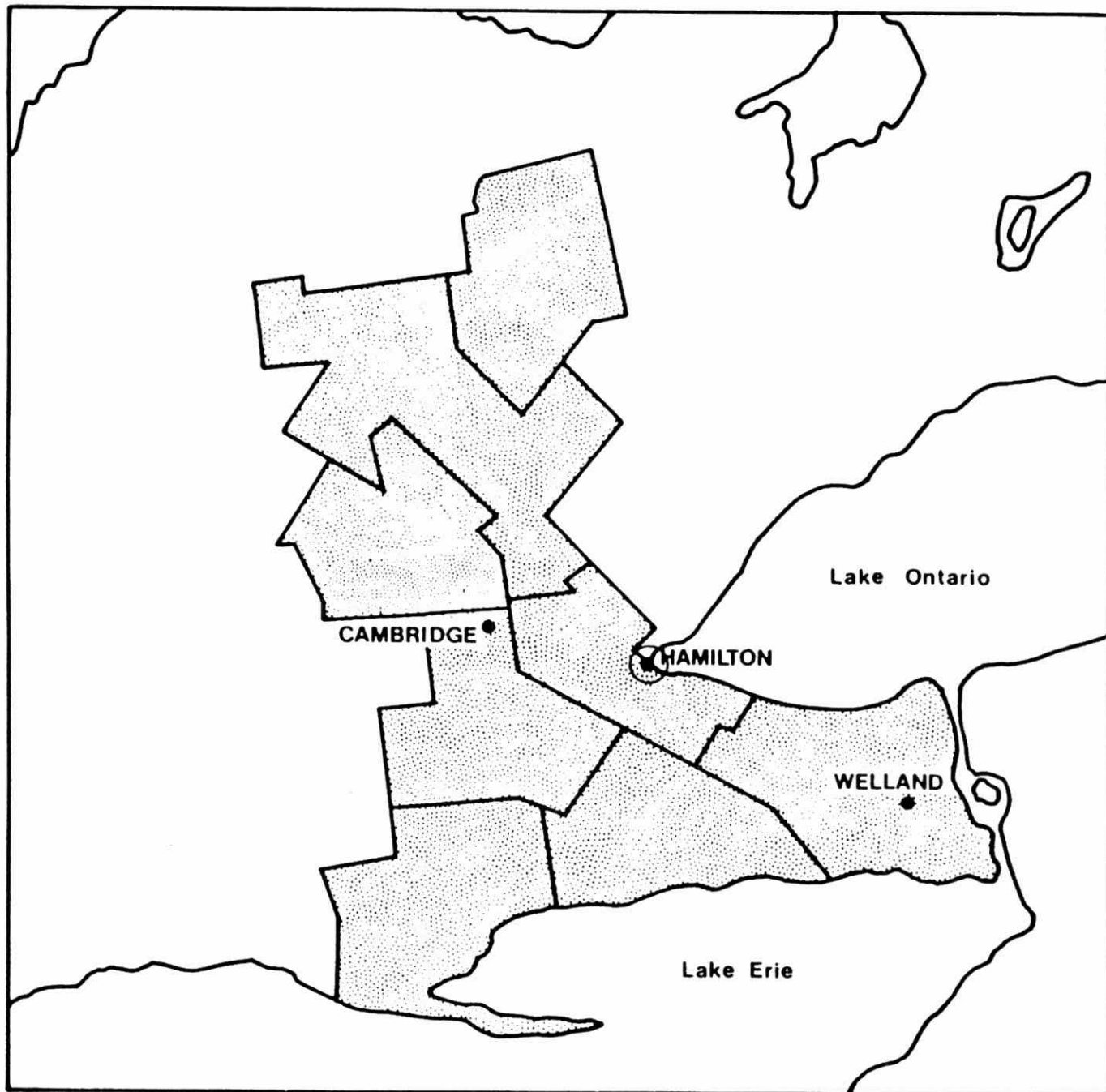


Ontario

Ministry
of the
Environment

West Central Region

②



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119 King St. West
P.O. Box 2112
L8N 3Z9
(416) 521-7640

DISTRICT OFFICES

Cambridge
400 Clyde Road
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N1R 5T8
(519) 653-1511

Haldimand-Norfolk/Brant
119 King St. West
P.O. Box 2112
L8N 3Z9
(416) 521-7732

Hamilton-Wentworth
119 King St. West
P.O. Box 2112
L8N 3Z9
(416) 521-7732

Welland
637 - 641 Niagara St. West
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(416) 384-9896

WEST-CENTRAL SUMMARY - 1989

Treatment Type	Number			Design Capacity (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Conventional Activated Sludge	13	10	23	386.21	1,063.15	1,449.36
Extended Aeration	6	2	8	11.72	6.95	18.67
High Rate	1	0	1	9.32	-	9.32
Oxidation Ditch	4	0	4	4.51	-	4.51
Communal Septic Tank	0	1	1	-	0.23	0.23
Aerated Lagoon	1	0	1	0.99	-	0.99
Convent. Lagoon Continuous	0	1	1	-	2.29	2.29
Conventional Lagoon Seasonal	5	2	7	4.02	1.73	5.75
Aerated Cell Plus Lagoon	2	2	4	4.86	4.98	9.84
Conventional Lagoon Annual	1	1	2	0.09	0.56	0.64
Rotat. Biological Contactor	0	1	1	-	58.19	58.19
TOTALS	34	20	54	421.72	1,138.08	1,559.80

1000M3/D: Thousands of cubic meters per day

ADF: Average Daily Flow

WEST-CENTRAL SUMMARY - 1989

Treatment Type	Number			Annual ADF (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Conventional Activated Sludge	13	10	23	232.45	529.35	761.80
Extended Aeration	6	2	8	5.56	5.66	11.22
High Rate	1	0	1	5.43	0.00	5.43
Oxidation Ditch	4	0	4	3.16	0.00	3.16
Communal Septic Tank	0	1	1	0.00	0.00	0.00
Aerated Lagoon	1	0	1	1.49	0.00	1.49
Convent. Lagoon Continuous	0	1	1	0.00	0.67	0.67
Conventional Lagoon Seasonal	5	2	7	2.47	0.82	3.29
Aerated Cell Plus Lagoon	2	2	4	2.56	4.38	6.94
Conventional Lagoon Annual	1	1	2	0.00	0.25	0.25
Rotat. Biological Contactor	0	1	1	0.00	56.38	56.38
TOTALS	34	20	54	267.43	597.51	864.94

1000M3/D: Thousands of cubic meters per day
ADF: Average Daily Flow

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ARTHUR
 PLANT : ARTHUR LAGOON
 WORKS NUMBER : 110000882
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.98 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : WELLINGTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : CONESTOGA RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,736

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.14	1.07	1.24	1.49	1.30	1.40	0.92	0.93	0.96	1.07	1.42	0.95	1.16	
LAGOON DISCHARGE	ND	ND	ND	165.64	ND	ND	ND	ND	ND	157.41	ND	ND	161.53	
<u>BOD5</u>														
INFLUENT (MG/L)	122.0	76.0	68.0	148.0	142.0	92.0	141.0	158.0	212.0	118.0	ND	48.0	120.5	
EFFLUENT (MG/L)	ND	ND	ND	25.1	ND	ND	ND	ND	ND	5.2	ND	ND	15.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	37.39	ND	ND	ND	ND	ND	5.56	ND	ND	17.63	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	100.0	294.0	61.0	113.0	109.0	109.0	154.0	228.0	125.0	96.0	ND	204.0	144.8	
EFFLUENT (MG/L)	ND	ND	ND	13.1	ND	ND	ND	ND	ND	10.4	ND	ND	11.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	19.51	ND	ND	ND	ND	ND	11.12	ND	ND	13.69	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	5.5	6.9	3.0	4.4	5.9	4.6	6.3	7.3	6.4	5.1	ND	7.5	5.7	
EFFLUENT (MG/L)	ND	ND	ND	0.2	ND	ND	ND	ND	ND	0.3	ND	ND	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	ND	ND	ND	0.29	ND	ND	ND	ND	ND	0.32	ND	ND	0.35	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BRANTFORD
 PLANT : AIRPORT WPCP (DISCHARGE TO A TILE FIELD)
 WORKS NUMBER : 120004798
 TREATMENT : COMMUNAL SEPTIC TANK
 :
 :
 DESIGN CAPACITY : 0.22 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : BRANT
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : NO DISC.TO SURFACE WATER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 65

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
<u>BOD5</u>														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
PERCENT REMOVAL													0	
PERCENT REMOVAL LIMITS													30	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
PERCENT REMOVAL													0	
PERCENT REMOVAL LIMITS													50	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30%	NO DISCHARGE
SS	50%	NO DISCHARGE
TP	NA	NO DISCHARGE

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BRANTFORD
 PLANT : BRANTFORD WPCP
 WORKS NUMBER : 110000043
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 81.81 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : BRANT
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : GRAND RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 73,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	49.80	48.62	49.63	52.63	51.18	51.82	49.44	47.34	48.75	49.42	50.77	45.41	49.57	
BOD5														
INFLUENT (MG/L)	220.0	220.0	267.0	231.0	210.0	219.0	166.0	230.0	234.0	343.0	232.0	191.0	230.3	
EFFLUENT (MG/L)	11.1	11.3	11.6	9.3	11.1	13.8	7.5	10.8	15.3	16.4	17.5	9.4	12.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	552.78	549.40	575.70	489.45	568.09	715.11	370.80	511.27	745.87	810.48	888.47	426.85	599.80	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	237.0	260.0	259.0	239.0	214.0	164.0	237.0	249.0	280.0	327.0	256.0	213.0	244.6	
EFFLUENT (MG/L)	9.7	8.5	8.4	7.8	8.9	10.0	4.5	7.9	7.9	13.0	16.1	11.0	9.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	483.06	413.27	416.89	410.51	455.50	518.20	222.48	373.98	385.12	642.46	817.39	499.51	470.92	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.3	5.9	6.1	5.6	6.8	6.3	8.4	8.2	9.8	7.8	7.7	4.8	7.0	
EFFLUENT (MG/L)	0.8	0.7	0.7	0.7	1.0	1.2*	1.0	0.9	1.0	1.0	1.0	0.8	0.9	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	39.84	34.03	34.74	36.84	51.18	62.18	49.44	42.60	48.75	49.42	50.77	36.32	44.61	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING IMPLEMENTED IN PHASES

START DATE END DATE ANTICIPATED
 COMPLIANCE

1990/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BRANTFORD
 PLANT : CAINSVILLE LAGOON (SERVES INDUSTRY)
 WORKS NUMBER : 120004716
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.16 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : BRANT
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : FAIRCHILD CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 65

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	35.90	ND	ND	ND	ND	ND	ND	ND	ND	35.90	
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	13.5	ND	ND	ND	ND	ND	ND	ND	ND	13.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	19.1	ND	ND	ND	ND	ND	ND	ND	ND	19.1	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	0.7	ND	ND	ND	ND	ND	ND	ND	ND	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CAMBRIDGE
 PLANT : GALT WPCP
 WORKS NUMBER : 110000276
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 38.64 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT :
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : GRAND RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 50,143

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	32.55	32.21	33.25	33.64	32.06	33.28	30.23	32.30	31.04	31.46	32.16	29.54	31.98	
BOD5														
INFLUENT (MG/L)	153.0	172.0	165.0	188.0	162.0	185.0	169.0	166.0	160.0	156.0	156.0	151.0	165.3	
EFFLUENT (MG/L)	17.0	14.2	13.4	12.3	14.2	11.5	9.1	9.1	7.4	8.5	9.6	11.2	11.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	553.35	457.38	445.55	413.77	455.25	382.72	275.09	293.93	229.69	267.41	308.73	330.84	367.77	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	154.0	206.0	182.0	213.0	197.0	193.0	181.0	165.0	162.0	158.0	158.0	159.0	177.3	
EFFLUENT (MG/L)	23.7	22.5	23.2	21.8	16.2	16.1	11.1	11.5	11.4	13.0	15.4	16.2	16.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	771.43	724.72	771.40	733.35	519.37	535.80	335.55	371.45	353.85	408.98	495.26	478.54	537.26	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.6	6.1	5.7	6.3	5.5	6.4	5.1	5.4	6.1	6.4	6.1	5.1	5.8	
EFFLUENT (MG/L)	0.8	0.8	0.8	0.8	0.7	0.8	0.4	0.6	0.7	0.6	0.6	0.7	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	26.04	25.76	26.60	26.91	22.44	26.62	12.09	19.38	21.72	18.87	19.29	20.67	22.39	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CAMBRIDGE
 PLANT : HESPELER WPCP
 WORKS NUMBER : 110001033
 TREATMENT : HIGH RATE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 9.31 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT :
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : SPEED RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 11,392

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.41	5.35	5.67	5.39	5.20	5.51	4.78	4.85	5.29	5.84	6.35	5.52	5.43	
BOD5														
INFLUENT (MG/L)	160.0	136.0	138.0	130.0	124.0	127.0	128.0	159.0	152.0	126.0	142.0	622.0	178.7	
EFFLUENT (MG/L)	67.0	ND	31.0	24.6	18.8	11.3	15.4	10.2	23.1	13.8	29.9	25.8	24.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	362.47	ND	175.77	132.59	97.76	62.26	73.61	49.47	122.19	80.59	189.86	142.41	133.58	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	178.0	225.0	230.0	208.0	247.0	241.0	264.0	230.0	261.0	249.0	234.0	274.0	236.8	
EFFLUENT (MG/L)	45.9	44.4	42.8	40.6	36.4	39.5	27.4	25.8	30.6	40.9	44.4	44.9	38.6*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	248.31	237.54	242.67	218.83	189.28	217.64	130.97	125.13	161.87	238.85	281.94	247.84	209.60	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.7	6.4	5.9	5.6	6.5	5.9	5.8	5.7	6.8	7.1	6.2	6.9	6.2	
EFFLUENT (MG/L)	1.3*	1.7*	1.0	0.8	1.0	1.0	1.4*	1.0	1.1*	1.1*	1.5*	1.4*	1.2	7
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	7.03	9.09	5.67	4.31	5.20	5.51	6.69	4.85	5.81	6.42	9.52	7.72	6.52	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - PRELIMINARY DESIGN PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989/01 1989/12

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CAMBRIDGE
 PLANT : PRESTON WPCP
 WORKS NUMBER : 110000622
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 16.86 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT :
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : GRAND RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 18,727

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	9.34	9.32	9.76	9.89	10.10	10.00	9.00	9.60	9.00	9.12	10.12	8.79	9.50	
BOD5														
INFLUENT (MG/L)	516.0	490.0	481.0	391.0	676.0	415.0	438.0	519.0	457.0	290.0	278.0	492.0	453.6	
EFFLUENT (MG/L)	13.9	11.7	14.4	9.3	13.3	9.6	5.2	8.1	9.3	9.5	7.1	7.9	9.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	129.82	109.04	140.54	91.97	134.33	96.00	46.80	77.76	83.70	86.64	71.85	69.44	94.05	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	360.0	578.0	449.0	507.0	577.0	476.0	560.0	642.0	538.0	386.0	379.0	393.0	487.1	
EFFLUENT (MG/L)	11.3	9.4	10.2	8.6	10.5	8.2	5.5	6.8	9.6	7.7	8.5	11.0	8.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	105.54	87.60	99.55	85.05	106.05	82.00	49.50	65.28	86.40	70.22	86.02	96.69	84.55	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.9	6.1	4.9	4.3	8.3	7.0	7.5	6.8	7.4	6.2	5.5	3.9	6.2	
EFFLUENT (MG/L)	0.8	0.5	0.6	0.4	1.4*	1.2*	1.3*	0.8	0.7	0.4	0.3	0.3	0.7	3
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	7.47	4.66	5.85	3.95	14.14	12.00	11.70	7.68	6.30	3.64	3.03	2.63	6.65	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - SAMPLING PROGRAM BEING MODIFIED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989/06	1989/08	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DELHI
 PLANT : DELHI WPCP
 WORKS NUMBER : 120001425
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : AEROBIC SINGLE STAGE
 DESIGN CAPACITY : 3.18 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BIG CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,257

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.41	2.32	2.24	2.10	2.14	1.97	1.80	1.76	1.76	2.41	2.54	2.36	2.15	
BOD5														
INFLUENT (MG/L)	169.0	148.0	142.0	169.0	142.0	120.0	157.0	118.0	145.0	168.0	138.0	147.0	146.9	
EFFLUENT (MG/L)	12.6	5.6	2.6	3.6	10.9	8.4	13.9	22.3	25.4	6.5	8.0	18.9	11.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	30.36	12.99	5.82	7.56	23.32	16.54	25.02	39.24	44.70	15.66	20.32	44.60	24.94	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	137.0	173.0	172.0	152.0	169.0	150.0	195.0	142.0	181.0	174.0	152.0	168.0	163.8	
EFFLUENT (MG/L)	9.8	6.8	5.5	13.2	11.5	6.6	4.8	6.8	7.5	4.6	6.0	9.7	7.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	23.61	15.77	12.32	27.72	24.61	13.00	8.64	11.96	13.20	11.08	15.24	22.89	16.56	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	6.2	7.1	5.7	7.7	5.3	7.1	5.7	6.5	7.4	3.4	5.7	6.2	
EFFLUENT (MG/L)	0.3	0.2	0.2	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.72	0.46	0.44	0.63	0.42	0.19	0.18	0.35	0.35	0.48	0.50	0.70	0.43	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DRAYTON
 PLANT : DRAYTON LAGOON (MUN OP JAN 1 1989)
 WORKS NUMBER : 120001782
 TREATMENT : CONVENTIONAL LAGOON ANNUAL
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.55 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : WELLINGTON
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : CONESTOGO RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED :

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	0.24	0.25	0.26	0.23	0.24	0.23	0.22	0.24	0.28	0.31	0.25	0.25	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	68.94	68.94	
BOD5														
INFLUENT (MG/L)	ND	ND	188.0	105.0	ND	190.0	207.0	ND	ND	222.0	ND	ND	182.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.0	3.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.75	0.75	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	198.0	122.0	ND	106.0	148.0	ND	ND	396.0	ND	ND	194.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	3.5	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.87	0.88	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.9	ND	ND	7.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1	0.1	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02	0.03	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DUNDAS
 PLANT : DUNDAS KING ST.WPCP
 WORKS NUMBER : 120001372
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 18.18 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : HAMILTON-WENTWORTH, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : COOTES PARADISE
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 19,501

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	11.23	10.20	11.08	11.89	10.77	12.37	10.78	ND	8.59	9.31	9.91	ND	10.61	
BOD5														
INFLUENT (MG/L)	111.0	128.0	119.0	112.0	121.0	105.0	124.0	105.0	121.0	115.0	86.0	ND	113.4	
EFFLUENT (MG/L)	1.1	1.2	2.0	1.2	2.0	0.6	1.0	0.9	1.3	1.4	1.6	ND	1.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	12.35	12.24	22.16	14.26	21.54	7.42	10.78	ND	11.16	13.03	15.85	ND	13.79	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	153.0	182.0	168.0	161.0	176.0	151.0	204.0	138.0	180.0	210.0	145.0	ND	169.8	
EFFLUENT (MG/L)	1.1	1.4	1.0	1.3	1.6	1.0	7.0	2.0	1.5	4.9	2.1	ND	2.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	12.35	14.28	11.08	15.45	17.23	12.37	75.46	ND	12.88	45.61	20.81	ND	24.40	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.6	5.3	4.6	4.0	4.1	3.8	4.6	4.6	3.6	5.3	4.1	ND	4.4	
EFFLUENT (MG/L)	0.2	0.2	0.3	0.1	0.3	0.1	1.0	0.8	0.2	0.3	0.4	ND	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.24	2.04	3.32	1.18	3.23	1.23	10.78	ND	1.71	2.79	3.96	ND	4.24	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DUNNVILLE
 PLANT : DUNNVILLE WPCP
 WORKS NUMBER : 120001443
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 7.72 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : GRAND RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 5,182

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.20	3.80	4.40	5.17	5.43	4.78	3.46	4.08	3.69	3.51	5.10	3.80	4.29	
BOD5														
INFLUENT (MG/L)	90.0	67.0	43.0	171.0	87.0	ND	106.0	175.0	144.0	175.0	258.0	127.0	131.2	
EFFLUENT (MG/L)	6.0	14.7	6.0	9.8	4.9	ND	4.2	4.8	6.2	5.0	9.5	5.9	7.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	25.20	55.86	26.40	50.66	26.60	ND	14.53	19.58	22.87	17.55	48.45	22.42	30.03	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	122.0	126.0	121.0	157.0	111.0	120.0	94.0	99.0	97.0	92.0	111.0	130.0	115.0	
EFFLUENT (MG/L)	13.9	27.4	8.0	12.3	12.6	14.5	6.3	7.9	7.2	6.2	6.8	8.8	11.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	58.38	104.12	35.20	63.59	68.41	69.31	21.79	32.23	26.56	21.76	34.68	33.44	47.19	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.0	4.7	5.0	4.6	4.4	3.8	4.5	5.1	4.6	4.6	7.0	4.8	4.8	
EFFLUENT (MG/L)	0.8	ND	0.7	0.5	0.6	2.6*	0.4	0.6	0.6	0.9	0.5	0.5	0.8	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	3.36	ND	3.08	2.58	3.25	12.42	1.38	2.44	2.21	3.15	2.55	1.90	3.43	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

EQUIPMENT/MAINTENANCE - NEW EQUIPMENT BEING INSTALLED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989/06	1989/06	1989/06

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DUNNVILLE
 PLANT : OSWEGO PARK LAGOON
 WORKS NUMBER : 110003068
 TREATMENT : CONVENTIONAL LAGOON ANNUAL

DESIGN CAPACITY : 0.04 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : OSWEGO CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 232

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	229.0	ND	466.0	193.0	ND	ND	266.0	272.0	ND	148.0	205.0	254.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	9.2	ND	ND	ND	ND	ND	ND	ND	9.2	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	270.0	90.0	ND	362.0	266.0	ND	ND	160.0	ND	ND	174.0	306.0	232.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	9.2	ND	ND	ND	ND	ND	ND	ND	9.2	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	11.6	ND	ND	ND	ND	ND	ND	11.6	ND	11.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ELORA
 PLANT : ELORA WPCP
 WORKS NUMBER : 110000178
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 3.06 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : WELLINGTON
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : GRAND RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,129

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.35	1.32	1.39	1.50	1.43	1.50	1.42	1.29	1.35	1.16	1.48	1.46	1.39	
BOD5														
INFLUENT (MG/L)	114.0	136.0	127.0	117.0	124.0	110.0	152.0	157.0	150.0	148.0	179.0	150.0	138.7	
EFFLUENT (MG/L)	3.3	3.2	1.3	2.2	5.0	2.1	0.6	0.7	0.4	0.7	3.2	4.8	2.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.45	4.22	1.80	3.30	7.15	3.15	0.85	0.90	0.54	0.81	4.73	7.00	3.20	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	158.0	198.0	163.0	143.0	158.0	120.0	178.0	172.0	180.0	142.0	143.0	144.0	158.3	
EFFLUENT (MG/L)	8.9	8.7	7.6	8.8	10.0	6.8	4.4	5.1	5.5	4.4	5.3	7.7	6.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	12.01	11.48	10.56	13.20	14.30	10.20	6.24	6.57	7.42	5.10	7.84	11.24	9.59	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.9	6.6	7.1	5.5	6.6	3.4	6.9	6.7	7.8	7.5	6.8	6.7	6.5	
EFFLUENT (MG/L)	0.3	0.3	0.3	0.3	0.5	0.8	0.1	0.1	0.1	0.2	0.7	1.7*	0.5	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.40	0.39	0.41	0.45	0.71	1.20	0.14	0.12	0.13	0.23	1.03	2.48	0.70	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

EQUIPMENT/MAINTENANCE - MAINTENANCE PROCEDURES BEING UPGRADED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989/12	1990/01	1990/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : FERGUS
 PLANT : FERGUS WPCP
 WORKS NUMBER : 110000249
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 5.00 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : WELLINGTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : GRAND RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 6,050

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.07	3.75	4.58	5.10	4.34	4.96	3.52	3.53	3.47	3.47	4.89	4.47	4.18	
BOD5														
INFLUENT (MG/L)	75.0	130.0	119.0	78.0	117.0	97.0	110.0	146.0	122.0	219.0	112.0	115.0	120.0	
EFFLUENT (MG/L)	7.1	15.1	20.8	5.3	9.6	19.8	9.8	8.9	10.5	13.7	10.4	11.1	11.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	28.89	56.62	95.26	27.03	41.66	98.20	34.49	31.41	36.43	47.53	50.85	49.61	49.32	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	166.0	179.0	158.0	143.0	204.0	183.0	415.0	323.0	183.0	237.0	297.0	164.0	221.0	
EFFLUENT (MG/L)	27.5	29.4	38.0	29.0	25.7	19.7	20.4	22.1	23.0	23.8	25.6	26.4	25.9*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	111.92	110.25	174.04	147.90	111.53	97.71	71.80	78.01	79.81	82.58	125.18	118.00	108.26	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.5	5.8	3.4	3.4	6.0	3.1	4.6	5.8	6.2	7.5	4.3	1.9	4.7	
EFFLUENT (MG/L)	0.4	0.5	0.6	0.3	0.5	0.6	0.5	0.5	0.5	0.4	0.5	0.5	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	1.62	1.87	2.74	1.53	2.17	2.97	1.76	1.76	1.73	1.38	2.44	2.23	2.09	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - ENFORCING SEWER-USE BYLAWS

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989/06 1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : FLAMBOROUGH
 PLANT : WATERDOWN WPCP
 WORKS NUMBER : 120005001
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 2.72 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : HAMILTON-WENTWORTH, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : GRINDSTONE CREEK
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,900

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.44	1.95	1.75	2.02	2.29	2.38	2.01	2.15	2.50	2.32	2.16	2.08	2.17	
BOD5														
INFLUENT (MG/L)	125.0	126.0	125.0	113.0	133.0	111.0	112.0	125.0	118.0	117.0	81.0	ND	116.9	
EFFLUENT (MG/L)	1.6	1.1	2.0	2.3	3.0	1.1	2.0	0.8	1.0	0.7	2.3	ND	1.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.90	2.14	3.50	4.64	6.87	2.61	4.02	1.72	2.50	1.62	4.96	ND	3.47	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	150.0	161.0	145.0	269.0	165.0	158.0	154.0	147.0	171.0	134.0	116.0	ND	160.9	
EFFLUENT (MG/L)	2.3	1.0	2.3	1.7	3.0	1.6	1.0	2.2	2.0	3.7	5.5	ND	2.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.61	1.95	4.02	3.43	6.87	3.80	2.01	4.73	5.00	8.58	11.88	ND	5.21	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.1	5.1	4.7	4.6	3.9	4.1	4.7	5.3	5.0	4.6	4.2	ND	4.7	
EFFLUENT (MG/L)	0.3	0.3	0.9	0.6	0.7	0.2	0.4	0.4	0.2	0.4	0.4	ND	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.73	0.58	1.57	1.21	1.60	0.47	0.80	0.86	0.50	0.92	0.86	ND	0.87	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : FORT ERIE
 PLANT : ANGER AVE. WPCP
 WORKS NUMBER : 120001292
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS (1990)
 :
 DESIGN CAPACITY : 16.36 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : NIAGARA, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : NIAGARA RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 13,765

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	8.94	8.75	13.14	9.88	15.28	13.13	8.66	9.72	9.98	8.88	13.44	8.42	10.69	
BOD5														
INFLUENT (MG/L)	120.0	90.0	73.0	22.0	66.0	41.0	189.0	150.0	70.0	133.0	61.0	101.0	93.0	
EFFLUENT (MG/L)	25.1	50.9	21.2	10.0	28.9	34.9	44.1	52.2	49.8	50.8	19.0	16.4	33.6*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	224.39	445.37	278.56	98.80	441.59	458.23	381.90	507.38	497.00	451.10	255.36	138.08	359.18	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	90.0	94.0	74.0	67.0	82.0	69.0	78.0	100.0	105.0	99.0	87.0	106.0	87.6	
EFFLUENT (MG/L)	27.2	34.7	26.1	29.8	25.9	27.3	33.2	37.4	39.7	37.6	10.4	15.5	28.7*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	243.16	303.62	342.95	294.42	395.75	358.44	287.51	363.52	396.20	333.88	139.77	130.51	306.80	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.9	3.4	2.7	2.5	2.5	2.3	3.3	3.0	3.8	3.6	2.2	3.2	3.0	
EFFLUENT (MG/L)	0.7	0.8	0.6	0.7	1.1*	0.4	0.8	1.0	0.8	1.1*	0.4	0.3	0.7	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	6.25	7.00	7.88	6.91	16.80	5.25	6.92	9.72	7.98	9.76	5.37	2.52	7.48	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO
SS	25.0 MG/L	NO
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - INFILTRATION PROBLEMS BEING CORRECTED
 SLUDGE DISPOSAL/REMOVAL - UPGRADING SLUDGE THICKENING FACILITIES
 SLUDGE DISPOSAL/REMOVAL - UPGRADING DIGESTOR
 FACILITY EXPANSION/UPGRADING - UPGRADING TO SECONDARY TREATMENT

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989	1990/02	1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : FORT ERIE
 PLANT : CRYSTAL BEACH WPCP
 WORKS NUMBER : 120001283
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 3.88 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : NIAGARA, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE ERIE
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,095

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.80	3.40	4.60	5.10	6.30	7.20	3.90	3.50	3.28	3.00	3.70	3.23	4.25	
BOD5														
INFLUENT (MG/L)	52.0	85.0	49.0	73.0	74.0	23.0	65.0	71.0	44.0	43.0	55.0	65.0	58.3	
EFFLUENT (MG/L)	7.7	17.1	14.0	13.3	9.6	8.4	29.2	12.5	22.6	17.9	6.9	15.0	14.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	29.26	58.14	64.40	67.83	60.48	60.48	113.88	43.75	74.12	53.70	25.53	48.45	61.63	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	79.0	102.0	54.0	96.0	61.0	63.0	108.0	77.0	58.0	63.0	61.0	64.0	73.8	
EFFLUENT (MG/L)	12.6	17.6	12.4	13.6	12.7	14.8	25.5	17.6	24.7	17.7	14.5	15.6	16.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	47.88	59.84	57.04	69.36	80.01	106.56	99.45	61.60	81.01	53.10	53.65	50.38	70.55	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.2	3.5	3.0	2.8	4.3	2.5	4.1	3.3	2.6	2.8	2.3	2.8	3.1	
EFFLUENT (MG/L)	0.5	1.1*	0.7	0.4	0.3	0.6	1.2*	0.9	1.3*	1.0	0.5	0.5	0.8	3
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.90	3.74	3.22	2.04	1.89	4.32	4.68	3.15	4.26	3.00	1.85	1.61	3.40	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - INFILTRATION PROBLEMS BEING CORRECTED
 SLUDGE DISPOSAL/REMOVAL - UPGRADING SLUDGE THICKENING FACILITIES
 FACILITY EXPANSION/UPGRADING - UPGRADING TO SECONDARY TREATMENT
 FACILITY EXPANSION/UPGRADING - UPGRADING SECONDARY CLARIFIERS
 FACILITY EXPANSION/UPGRADING - UPGRADING PRIMARY CLARIFIERS
 FACILITY EXPANSION/UPGRADING - UPGRADING DISINFECTION PROCESS

START DATE	END DATE	ANTICIPATED COMPLIANCE
1990/09	1991	
1990	1991	
1990	1991	
1990	1991	
1990	1991	
1990	1991	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : FORT ERIE
 PLANT : STEVENSVILLE-DOUGLASTOWN LAGOON
 WORKS NUMBER : 120003110
 TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
 :
 :
 DESIGN CAPACITY : 2.29 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : NIAGARA, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : NIAGARA RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.65	0.59	0.78	0.76	0.73	0.72	0.53	0.54	0.63	0.63	0.86	0.63	0.67	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	325.0	112.0	35.0	93.0	34.0	48.0	111.0	89.0	112.0	56.0	34.0	104.0	96.1	
EFFLUENT (MG/L)	6.9	10.9	11.5	6.0	12.8	2.4	5.7	10.6	6.6	9.1	6.1	8.6	8.1	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	4.48	6.43	8.97	4.56	9.34	1.72	3.02	5.72	4.15	5.73	5.24	5.41	5.43	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	490.0	147.0	113.0	162.0	47.0	52.0	108.0	126.0	99.0	68.0	34.0	82.0	127.3	
EFFLUENT (MG/L)	9.4	24.0	50.0	14.8	19.8	8.1	14.5	50.0	46.0	6.0	4.3	12.9	21.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	6.11	14.16	39.00	11.24	14.45	5.83	7.68	27.00	28.98	3.78	3.69	8.12	14.54	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.5	ND	ND	ND	2.5	3.7	5.7	5.0	6.3	3.8	3.3	6.4	4.7	
EFFLUENT (MG/L)	2.5	ND	ND	ND	3.7	2.2	1.4	1.5	1.5	1.9	1.9	2.7	2.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	1.62	ND	ND	ND	2.70	1.58	0.74	0.81	0.94	1.19	1.63	1.70	1.41	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GRAND VALLEY
 PLANT : GRAND VALLEY WPCP
 WORKS NUMBER : 110000301
 TREATMENT : OXIDATION DITCH
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.60 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : DUFFERIN
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : GRAND RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,060

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.42	0.37	0.51	0.59	0.41	0.45	0.31	0.33	0.32	0.34	0.51	0.35	0.41	
BOD5														
INFLUENT (MG/L)	214.0	177.0	136.0	168.0	132.0	93.0	125.0	147.0	225.0	240.0	220.0	229.0	175.5	
EFFLUENT (MG/L)	5.9	8.5	4.3	5.4	4.4	3.3	1.4	2.2	2.1	2.1	9.4	9.3	4.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.47	3.14	2.19	3.18	1.80	1.48	0.43	0.72	0.67	0.71	4.79	3.25	2.01	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	98.0	153.0	97.0	100.0	131.0	116.0	219.0	176.0	148.0	178.0	155.0	186.0	146.4	
EFFLUENT (MG/L)	11.7	21.7	18.4	16.6	12.4	9.6	8.6	7.3	7.8	10.7	16.4	18.5	13.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.91	8.02	9.38	9.79	5.08	4.32	2.66	2.40	2.49	3.63	8.36	6.47	5.45	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.8	6.5	4.4	5.3	6.2	6.0	7.4	6.7	7.6	9.0	6.5	7.9	6.5	
EFFLUENT (MG/L)	0.5	0.8	0.6	0.6	0.6	0.5	0.4	0.5	0.5	0.4	0.4	0.6	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.21	0.29	0.30	0.35	0.24	0.22	0.12	0.16	0.16	0.13	0.20	0.21	0.21	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GRIMSBY
 PLANT : BAKER ROAD WPCP
 WORKS NUMBER : 120001684
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 18.18 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : NIAGARA, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 19,850

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	12.26	11.24	14.46	15.76	17.97	14.86	11.65	10.56	11.82	11.72	14.41	11.46	13.18	
<u>BOD5</u>														
INFLUENT (MG/L)	137.0	157.0	131.0	106.0	131.0	168.0	216.0	178.0	206.0	170.0	166.0	187.0	162.8	
EFFLUENT (MG/L)	25.6	26.1	38.2	31.7	15.8	19.3	23.8	9.5	11.6	12.5	21.2	30.3	22.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	313.85	293.36	552.37	499.59	283.92	286.79	277.27	100.32	137.11	146.50	305.49	347.23	291.28	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	184.0	210.0	177.0	162.0	158.0	185.0	201.0	201.0	201.0	183.0	183.0	193.0	186.5	
EFFLUENT (MG/L)	6.5	9.2	7.2	4.7	9.8	8.9	7.7	6.2	5.3	8.5	9.9	5.7	7.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	79.69	103.40	104.11	74.07	176.10	132.25	89.70	65.47	62.64	99.62	142.65	65.32	98.85	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	7.5	6.7	4.8	4.4	4.6	6.3	7.4	7.6	5.9	6.4	7.2	7.3	6.3	
EFFLUENT (MG/L)	0.2	0.5	0.2	0.2	0.5	0.4	0.4	0.3	0.2	0.4	1.0	0.4	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.45	5.62	2.89	3.15	8.98	5.94	4.66	3.16	2.36	4.68	14.41	4.58	5.27	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GRIMSBY
 PLANT : BIGGAR LAGOON
 WORKS NUMBER : 120001256
 TREATMENT : AERATED CELL PLUS LAGOON
 : CONTINUOUS DISCHARGE
 :
 DESIGN CAPACITY : 1.13 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : NIAGARA, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,075

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.87	0.81	1.15	1.11	1.25	1.12	0.75	0.73	1.66	1.28	1.20	0.74	1.06	
LAGOON DISCHARGE	26.94	22.78	35.63	33.09	38.77	33.49	23.06	22.77	49.58	39.56	35.95	22.90	32.04	
BOD5														
INFLUENT (MG/L)	191.0	184.0	221.0	116.0	172.0	232.0	338.0	230.0	1,653.0	1,314.0	586.0	476.0	476.1	
EFFLUENT (MG/L)	8.0	11.1	11.7	17.6	5.1	8.9	4.2	3.9	5.0	3.4	4.4	7.1	7.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	6.96	8.99	13.45	19.53	6.37	9.96	3.15	2.84	8.30	4.35	5.28	5.25	7.95	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	101.0	139.0	89.0	89.0	99.0	113.0	128.0	257.0	507.0	293.0	124.0	165.0	175.3	
EFFLUENT (MG/L)	6.5	6.4	82.5	20.5	7.4	3.6	4.4	4.6	5.3	6.2	10.5	9.3	13.9	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	5.65	5.18	94.87	22.75	9.25	4.03	3.30	3.35	8.79	7.93	12.60	6.88	14.73	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.7	8.5	4.1	4.5	4.5	4.3	4.2	6.2	9.3	7.5	3.6	8.1	5.8	
EFFLUENT (MG/L)	4.5	3.3	3.2	2.9	2.5	0.7	1.0	1.8	3.5	2.9	2.2	2.4	2.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	3.91	2.67	3.68	3.21	3.12	0.78	0.75	1.31	5.81	3.71	2.64	1.77	2.76	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - SEWAGE UPGRADE UNDERWAY

START DATE END DATE ANTICIPATED
 COMPLIANCE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GUELPH
 PLANT : GUELPH WPCP
 WORKS NUMBER : 120003094
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 54.55 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : WELLINGTON
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : SPEED RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 82,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	44.34	44.49	44.04	46.61	43.68	45.08	35.73	32.88	46.96	45.09	44.91	44.91	43.23	
BOD5														
INFLUENT (MG/L)	157.0	179.0	207.0	164.0	166.0	166.0	171.0	205.0	240.0	166.0	194.0	194.0	184.1	
EFFLUENT (MG/L)	4.2	4.3	8.3	11.5	7.1	5.9	4.6	4.5	3.9	6.5	6.2	3.0	5.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	186.22	191.30	365.53	536.01	310.12	265.97	164.35	147.96	183.14	293.08	278.44	134.73	250.73	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	187.0	194.0	196.0	171.0	178.0	211.0	191.0	238.0	306.0	208.0	221.0	192.0	207.8	
EFFLUENT (MG/L)	11.4	9.5	10.8	12.0	6.9	8.3	7.0	5.9	7.9	8.2	6.3	7.9	8.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	505.47	422.65	475.63	559.32	301.39	374.16	250.11	193.99	370.98	369.73	282.93	354.78	367.46	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.6	7.7	7.4	7.1	6.6	6.3	5.3	6.9	6.1	5.8	7.2	7.3	6.8	
EFFLUENT (MG/L)	0.8	0.9	0.6	0.5	0.4	0.4	0.5	0.6	0.6	0.5	0.7	0.7	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	35.47	40.04	26.42	23.30	17.47	18.03	17.86	19.72	28.17	22.54	31.43	31.43	25.94	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - MINOR PROCESS/OPERATIONAL MODIFICATION

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989/10

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HALDIMAND
 PLANT : CALEDONIA WPCP
 WORKS NUMBER : 120001452
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 2.27 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : GRAND RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 5,655

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.50	2.40	3.18	3.45	2.68	1.87	2.36	2.19	2.39	2.26	2.79	2.44	2.54	
BOD5														
INFLUENT (MG/L)	115.0	130.0	91.0	111.0	110.0	136.0	293.0	207.0	172.0	225.0	213.0	124.0	160.6	
EFFLUENT (MG/L)	19.1	17.3	26.6	21.6	26.1	34.0	45.2	19.7	18.7	15.5	9.5	16.4	22.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	47.75	41.52	84.58	74.52	69.94	63.58	106.67	43.14	44.69	35.03	26.50	40.01	57.15	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	174.0	255.0	211.0	266.0	202.0	253.0	236.0	350.0	305.0	278.0	200.0	200.0	244.2	
EFFLUENT (MG/L)	13.3	17.4	16.0	13.8	22.0	18.3	15.9	11.3	19.8	10.8	6.2	9.0	14.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	33.25	41.76	50.88	47.61	58.96	34.22	37.52	24.74	47.32	24.40	17.29	21.96	36.83	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.6	6.5	6.2	5.5	5.6	6.9	6.3	6.9	6.9	7.3	6.3	7.4	6.5	
EFFLUENT (MG/L)	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.4	0.3	0.3	0.3	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.75	0.72	0.95	1.38	0.80	0.56	0.70	0.43	0.95	0.67	0.83	0.73	0.76	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HALDIMAND
 PLANT : CAYUGA WPCP
 WORKS NUMBER : 110000089
 TREATMENT : OXIDATION DITCH
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.90 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : GRAND RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,258

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.53	0.45	0.62	0.69	0.67	0.55	0.42	0.35	0.43	0.42	0.62	0.42	0.51	
BOD5														
INFLUENT (MG/L)	91.0	106.0	117.0	68.0	105.0	152.0	165.0	283.0	169.0	239.0	133.0	156.0	148.7	
EFFLUENT (MG/L)	5.8	2.3	2.8	7.7	0.9	0.5	1.3	0.5	0.6	0.7	2.3	0.3	2.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.07	1.03	1.73	5.31	0.60	0.27	0.54	0.17	0.25	0.29	1.42	0.12	1.07	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	100.0	173.0	166.0	120.0	130.0	137.0	190.0	501.0	222.0	170.0	130.0	177.0	184.7	
EFFLUENT (MG/L)	10.5	10.3	10.0	18.0	11.3	0.5	3.5	4.0	10.0	1.7	7.8	4.7	7.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.56	4.63	6.20	12.42	7.57	0.27	1.47	1.40	4.30	0.71	4.83	1.97	3.93	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.7	6.2	7.2	5.3	6.7	7.7	11.5	10.2	8.6	0.8	7.1	7.3	7.0	
EFFLUENT (MG/L)	0.3	0.5	0.4	0.5	0.4	0.2	0.3	0.5	0.5	0.3	0.4	0.4	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.15	0.22	0.24	0.34	0.26	0.11	0.12	0.17	0.21	0.12	0.24	0.16	0.20	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HALDIMAND
 PLANT : HAGERSVILLE WPCP
 WORKS NUMBER : 110001024
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : AEROBIC SINGLE STAGE
 DESIGN CAPACITY : 1.00 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : SANDUSK CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,268

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.27	1.25	1.73	1.64	1.39	1.15	0.72	0.66	0.89	0.81	1.36	0.91	1.15	
BOD5														
INFLUENT (MG/L)	251.0	156.0	292.0	250.0	125.0	242.0	147.0	344.0	150.0	317.0	185.0	293.0	229.3	
EFFLUENT (MG/L)	5.6	10.4	14.5	7.9	3.6	19.9	6.6	34.6	31.5	13.7	16.7	7.7	14.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.11	13.00	25.08	12.95	5.00	22.88	4.75	22.83	28.03	11.09	22.71	7.00	16.56	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	133.0	129.0	133.0	150.0	65.0	126.0	141.0	240.0	131.0	200.0	136.0	191.0	147.9	
EFFLUENT (MG/L)	7.8	7.8	15.3	18.5	7.5	8.5	6.5	13.0	8.0	9.0	9.5	7.7	9.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.90	9.75	26.46	30.34	10.42	9.77	4.68	8.58	7.12	7.29	12.92	7.00	11.39	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	9.6	4.9	7.6	8.2	5.1	8.7	6.9	6.9	6.6	9.0	6.5	8.7	7.4	
EFFLUENT (MG/L)	0.3	0.2	0.6	0.3	0.3	0.4	0.5	1.0	0.8	0.4	0.5	0.4	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.38	0.25	1.03	0.49	0.41	0.46	0.36	0.66	0.71	0.32	0.68	0.36	0.58	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HAMILTON
 PLANT : WOODWARD AVE.WPCP (OFFSITE CHEM.ADDN)
 WORKS NUMBER : 120001504
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 409.14 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : HAMILTON-WENTWORTH, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : REDHILL CREEK
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 300,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	233.66	276.85	345.50	316.86	345.95	360.95	338.22	309.13	285.03	283.22	339.13	292.31	310.57	
BOD5														
INFLUENT (MG/L)	189.0	227.0	182.0	158.0	119.0	125.0	91.0	107.0	105.0	132.0	106.0	151.0	141.0	
EFFLUENT (MG/L)	12.0	8.0	13.0	12.0	9.0	7.0	3.0	4.0	6.0	7.0	4.0	5.0	7.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2803.92	2214.80	4491.50	3802.32	3113.55	2526.65	1014.66	1236.52	1710.18	1982.54	1356.52	1461.55	2329.28	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	482.0	586.0	477.0	384.0	304.0	335.0	365.0	249.0	241.0	357.0	259.0	401.0	370.0	
EFFLUENT (MG/L)	25.0	13.0	28.0	19.0	17.0	17.0	12.0	10.0	15.0	13.0	9.0	8.0	15.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5841.50	3599.05	9674.00	6020.34	5881.15	6136.15	4058.64	3091.30	4275.45	3681.86	3052.17	2338.48	4813.84	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.8	6.8	5.6	4.8	3.9	4.3	4.6	4.0	3.5	5.8	3.9	5.7	4.8	
EFFLUENT (MG/L)	0.7	0.3	0.5	0.4	0.5	0.4	0.5	0.4	0.5	0.4	0.3	0.3	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	163.56	83.05	172.75	126.74	172.97	144.38	169.11	123.65	142.51	113.28	101.73	87.69	124.23	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HARRISTON
 PLANT : HARRISTON LAGOON
 WORKS NUMBER : 110000329
 TREATMENT : AERATED LAGOON
 : SEASONAL DISCHARGE
 :
 DESIGN CAPACITY : 0.99 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : WELLINGTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MAITLAND RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,963

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.76	1.44	1.85	1.89	1.48	1.60	1.00	1.15	1.19	1.28	1.81	1.41	1.49	
LAGOON DISCHARGE	51.63	26.20	22.37	69.45	ND	ND	ND	ND	ND	ND	24.36	46.64	40.11	
BOD5														
INFLUENT (MG/L)	116.0	236.0	119.0	133.0	128.0	124.0	167.0	140.0	144.0	156.0	87.0	181.0	144.3	
EFFLUENT (MG/L)	3.6	8.3	7.0	9.1	ND	ND	ND	ND	ND	ND	2.5	10.0	6.8	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	6.33	11.95	12.95	17.19	ND	ND	ND	ND	ND	ND	4.52	14.10	10.13	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	198.0	434.0	197.0	211.0	177.0	195.0	157.0	192.0	259.0	231.0	64.0	196.0	209.3	
EFFLUENT (MG/L)	4.1	8.6	6.0	10.8	ND	ND	ND	ND	ND	ND	6.0	12.4	8.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	7.21	12.38	11.10	20.41	ND	ND	ND	ND	ND	ND	10.86	17.48	11.92	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.3	13.9	7.1	7.4	6.6	7.7	7.1	6.9	7.3	7.8	4.7	7.4	7.7	
EFFLUENT (MG/L)	0.2	0.2	0.1	0.2	ND	ND	ND	ND	ND	ND	0.6	0.9	0.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.35	0.28	0.18	0.37	ND	ND	ND	ND	ND	ND	1.08	1.26	0.60	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KITCHENER
 PLANT : KITCHENER WPCP
 WORKS NUMBER : 110000374
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 122.74 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT :
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : GRAND RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 138,271

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	73.02	69.63	71.42	73.46	70.28	73.80	63.84	63.74	63.97	63.07	69.22	61.66	68.09	
BOD5														
INFLUENT (MG/L)	218.0	207.0	193.0	226.0	242.0	194.0	185.0	184.0	170.0	204.0	281.0	294.0	216.5	
EFFLUENT (MG/L)	8.9	8.4	6.6	15.3	16.3	15.7	15.7	9.6	10.5	13.7	16.5	18.0	12.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	649.87	584.89	471.37	1123.93	1145.56	1158.66	1002.28	611.90	671.68	864.05	1142.13	1109.88	878.36	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	250.0	236.0	189.0	221.0	239.0	240.0	231.0	252.0	249.0	240.0	261.0	261.0	239.1	
EFFLUENT (MG/L)	6.3	7.1	5.0	4.4	5.4	4.8	10.8	6.7	4.1	5.8	4.2	3.3	5.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	460.02	494.37	357.10	323.22	379.51	354.24	689.47	427.05	262.27	365.80	290.72	203.47	388.11	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.6	7.0	7.0	6.1	6.5	6.5	6.9	ND	7.4	7.0	6.8	7.7	6.9	
EFFLUENT (MG/L)	0.7	0.6	0.6	0.7	0.9	0.8	1.0	1.0	1.0	0.7	0.6	0.4	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	51.11	41.77	42.85	51.42	63.25	59.04	63.84	63.74	63.97	44.14	41.53	24.66	54.47	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MOUNT FOREST
 PLANT : MOUNT FOREST WPCP
 WORKS NUMBER : 120001381
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 2.45 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : WELLINGTON
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : SAUGEEN RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,599

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.32	1.86	3.00	2.81	1.97	1.74	1.37	1.44	1.56	1.78	2.41	1.81	2.01	
BOD5														
INFLUENT (MG/L)	75.0	97.0	99.0	48.0	96.0	111.0	204.0	165.0	129.0	122.0	97.0	111.0	112.8	
EFFLUENT (MG/L)	1.5	2.3	1.3	1.1	8.9	7.6	3.0	1.9	1.8	0.8	3.4	1.0	2.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.48	4.27	3.90	3.09	17.53	13.22	4.11	2.73	2.80	1.42	8.19	1.81	5.83	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	54.0	102.0	132.0	162.0	153.0	143.0	191.0	193.0	146.0	122.0	93.0	256.0	145.6	
EFFLUENT (MG/L)	4.0	7.0	4.5	9.0	14.7	7.3	6.7	5.7	5.0	4.1	5.6	4.1	6.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.28	13.02	13.50	25.29	28.95	12.70	9.17	8.20	7.80	7.29	13.49	7.42	13.07	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.2	ND	4.5	3.2	5.7	5.5	7.3	6.9	6.0	5.1	4.8	6.6	5.4	
EFFLUENT (MG/L)	0.2	ND	0.2	0.2	0.7	0.6	0.3	0.3	0.3	0.2	0.2	0.2	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.46	ND	0.60	0.56	1.37	1.04	0.41	0.43	0.46	0.35	0.48	0.36	0.60	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NANTICOKE
 PLANT : JARVIS LAGOON
 WORKS NUMBER : 120001434
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.85 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : SANDUSK CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,174

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.92	0.90	1.01	1.18	0.96	0.97	0.72	0.87	0.53	0.54	0.71	0.63	0.83	
LAGOON DISCHARGE	ND	ND	82.96	ND	ND	ND	ND	ND	ND	ND	ND	ND	82.96	
BOD5														
INFLUENT (MG/L)	91.0	103.0	210.0	54.0	96.0	176.0	130.0	191.0	233.0	197.0	ND	191.0	152.0	
EFFLUENT (MG/L)	ND	ND	16.9	ND	ND	ND	ND	ND	ND	ND	ND	22.0	19.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	17.06	ND	ND	ND	ND	ND	ND	ND	ND	13.86	16.19	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	147.0	199.0	212.0	105.0	99.0	180.0	176.0	278.0	241.0	390.0	ND	208.0	203.2	
EFFLUENT (MG/L)	ND	ND	37.9	ND	ND	ND	ND	ND	ND	ND	ND	30.5	34.2*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	38.27	ND	ND	ND	ND	ND	ND	ND	ND	19.21	28.39	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.0	7.4	7.2	5.0	6.6	6.3	7.1	8.8	10.7	11.0	ND	9.8	7.9	
EFFLUENT (MG/L)	ND	ND	0.5	ND	ND	ND	ND	ND	ND	ND	ND	0.2	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	0.50	ND	ND	ND	ND	ND	ND	ND	ND	0.12	0.33	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - CONSTRUCTION COMPLETE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989/08	1990	
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NANTICOKE
 PLANT : PORT DOVER WPCP
 WORKS NUMBER : 110000604
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 4.09 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE ERIE
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,750

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.01	3.55	3.52	3.98	3.00	2.87	2.64	3.09	3.67	134.45	4.37	3.52	14.31	
BOD5														
INFLUENT (MG/L)	65.0	104.0	203.0	53.0	142.0	80.0	140.0	183.0	230.0	166.0	129.0	83.0	131.5	
EFFLUENT (MG/L)	14.3	32.1	12.7	10.3	16.3	11.2	9.9	20.7	89.5	66.7	26.8	36.0	28.9	
LOADING (KG/D)	43.04	113.95	44.70	40.99	48.90	32.14	26.13	63.96	328.46	8967.81	117.11	126.72	413.56	
PERCENT REMOVAL	78	69	94	81	89	86	93	89	61	60	79	57	78	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	104.0	138.0	152.0	97.0	173.0	90.0	132.0	131.0	90.0	113.0	181.0	94.0	124.6	
EFFLUENT (MG/L)	25.5	18.3	25.6	14.3	23.8	12.9	12.8	21.0	44.8	45.3	23.9	24.8	24.4	
LOADING (KG/D)	76.75	64.96	90.11	56.91	71.40	37.02	33.79	64.89	164.41	6090.58	104.44	87.29	349.16	
PERCENT REMOVAL	75	87	83	85	86	86	90	84	50	60	87	74	80	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.7	4.3	6.7	2.9	5.8	3.8	5.3	5.5	8.7	5.7	5.1	3.9	5.1	
EFFLUENT (MG/L)	0.6	0.5	0.5	0.3	0.5	0.3	0.4	0.8	1.9*	1.3*	0.7	0.7	0.7	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	1.80	1.77	1.76	1.19	1.50	0.86	1.05	2.47	6.97	174.78	3.05	2.46	10.02	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - UPGRADING TO SECONDARY TREATMENT

START DATE	END DATE	ANTICIPATED COMPLIANCE
1991/03	1992/09	1993

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NANTICOKE
 PLANT : STELCO IND. PARK LAGOON
 WORKS NUMBER : 110003371
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.50 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : CENTER CR
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED :

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.17	0.19	0.17	0.21	0.23	0.25	0.21	0.23	0.21	0.26	0.23	0.16	0.21	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	44.73	ND	ND	44.73	
BOD5														
INFLUENT (MG/L)	76.0	9.0	13.0	9.0	55.0	13.0	6.0	3.0	14.0	9.0	5.0	56.0	22.3	
EFFLUENT (MG/L)	1.7	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	2.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	0.28	ND	ND	ND	ND	ND	ND	ND	ND	0.75	ND	ND	0.48	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	153.0	62.0	28.0	30.0	55.0	44.0	29.0	15.0	36.0	16.0	34.0	263.0	63.8	
EFFLUENT (MG/L)	4.2	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	4.1	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	0.71	ND	ND	ND	ND	ND	ND	ND	ND	1.01	ND	ND	0.86	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.5	5.8	1.3	0.8	4.0	0.8	1.4	4.0	ND	0.6	1.2	1.1	2.2	
EFFLUENT (MG/L)	0.6	ND	ND	ND	ND	ND	ND	ND	ND	0.2	ND	ND	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.10	ND	ND	ND	ND	ND	ND	ND	ND	0.05	ND	ND	0.08	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NANTICOKE
 PLANT : TOWNSEND LAGOON
 WORKS NUMBER : 110003424
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 2.095 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : NANTICOKE CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 537

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.13	0.14	0.16	0.25	0.15	0.16	0.16	0.13	0.16	0.20	0.20	0.17	0.17	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO DIRECT DISCHARGE
SS	25.0 MG/L	NO DIRECT DISCHARGE
TP	1.0 MG/L	NO DIRECT DISCHARGE

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NANTICOKE
 PLANT : WATERFORD LAGOON
 WORKS NUMBER : 110001195
 TREATMENT : AERATED CELL PLUS LAGOON
 : CONTINUOUS DISCHARGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 DESIGN CAPACITY : 2.13 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : NANTICOKE CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,550

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.22	1.21	1.15	1.01	0.92	0.94	1.15	1.55	1.29	1.47	1.39	0.74	1.17	
LAGOON DISCHARGE	37.88	33.86	35.78	30.38	28.65	28.77	35.77	48.12	38.71	45.69	41.87	22.92	35.70	
BOD5														
INFLUENT (MG/L)	114.0	95.0	103.0	94.0	94.0	114.0	128.0	139.0	131.0	125.0	148.0	105.0	115.8	
EFFLUENT (MG/L)	9.2	15.0	17.1	14.8	16.7	9.4	10.6	7.7	16.9	18.5	19.2	14.6	14.1	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	11.22	18.15	19.66	14.94	15.36	8.83	12.19	11.93	21.80	27.19	26.68	10.80	16.50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	141.0	115.0	152.0	135.0	119.0	141.0	129.0	108.0	124.0	102.0	137.0	97.0	125.0	
EFFLUENT (MG/L)	15.7	27.1	20.5	16.6	32.5	32.7	17.0	11.5	36.5	28.4	31.1	22.4	24.3	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	19.15	32.79	23.57	16.76	29.90	30.73	19.55	17.82	47.08	41.74	43.22	16.57	28.43	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.7	5.0	5.5	5.3	5.7	4.9	6.1	6.7	5.0	5.5	6.0	5.4	5.6	
EFFLUENT (MG/L)	0.2	0.4	0.4	0.3	0.3	0.2	0.3	0.2	0.2	0.3	0.4	0.3	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.24	0.48	0.46	0.30	0.27	0.18	0.34	0.31	0.25	0.44	0.55	0.22	0.35	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NIAGARA FALLS
 PLANT : STAMFORD WPCP
 WORKS NUMBER : 120001363
 TREATMENT : ROTATING BIOLOGICAL CONTACTOR
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 58.18 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : NIAGARA, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : CHIPPAWA POWER CANAL
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 67,835

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	52.01	47.80	58.40	60.30	68.20	64.80	56.61	52.74	53.60	54.50	63.04	44.55	56.38	
BOD5														
INFLUENT (MG/L)	43.0	87.0	59.0	138.0	87.0	46.0	96.0	84.0	98.0	88.0	46.0	67.0	78.3	
EFFLUENT (MG/L)	13.0	15.0	11.5	16.0	14.0	10.0	14.0	24.0	13.0	15.0	21.0	17.2	15.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	676.13	717.00	671.60	964.80	954.80	648.00	792.54	1265.76	696.80	817.50	1323.84	766.26	862.61	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	98.0	124.0	166.0	113.0	122.0	144.0	136.0	110.0	108.0	5.0	80.0	87.0	107.8	
EFFLUENT (MG/L)	20.6	18.0	23.0	17.0	16.0	17.0	18.0	18.0	19.6	18.0	18.0	17.6	18.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1071.40	860.40	1343.20	1025.10	1091.20	1101.60	1018.98	949.32	1050.56	981.00	1134.72	784.08	1037.39	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.2	4.1	3.7	5.6	5.1	4.8	5.9	4.6	4.2	4.7	3.1	3.7	4.5	
EFFLUENT (MG/L)	0.2	0.2	0.6	0.3	0.5	0.4	0.8	0.8	0.5	1.0	0.6	0.6	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	10.40	9.56	35.04	18.09	34.10	25.92	45.28	42.19	26.80	54.50	37.82	26.73	28.19	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW
 COLLECTION SYSTEM - SEWAGE UPGRADE UNDERWAY

START DATE END DATE ANTICIPATED
 COMPLIANCE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NIAGARA-ON-THE-LAKE
 PLANT : NIAGARA-ON-THE-LAKE LAGOON
 WORKS NUMBER : 120001238
 TREATMENT : AERATED CELL PLUS LAGOON
 : CONTINUOUS DISCHARGE
 :
 DESIGN CAPACITY : 3.84 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : NIAGARA, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 5,210

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.60	2.30	3.20	4.20	5.30	4.50	3.13	2.91	3.00	2.89	3.25	2.61	3.32	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	104.0	45.0	104.0	46.0	117.0	94.0	97.0	130.0	189.0	207.0	110.0	100.0	111.9	
EFFLUENT (MG/L)	14.0	12.0	17.4	19.8	30.0	20.0	32.0	25.0	38.0	22.0	12.0	14.1	21.4	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	36.40	27.60	55.68	83.16	159.00	90.00	100.16	72.75	114.00	63.58	39.00	36.80	71.05	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	82.0	141.0	132.0	70.0	144.0	148.0	116.0	142.0	177.0	221.0	115.0	157.0	137.1	
EFFLUENT (MG/L)	17.0	15.0	22.5	35.0	26.0	30.0	33.0	34.0	35.0	28.0	27.0	14.5	26.4	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	44.20	34.50	72.00	147.00	137.80	135.00	103.29	98.94	105.00	80.92	87.75	37.84	87.65	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.6	6.5	6.1	3.3	6.2	6.8	6.5	5.8	8.5	6.3	5.6	3.9	6.0	
EFFLUENT (MG/L)	5.3	6.0	6.0	3.8	3.9	4.6	3.1	3.0	3.3	2.9	3.9	3.5	4.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	13.78	13.80	19.20	15.96	20.67	20.70	9.70	8.73	9.90	8.38	12.67	9.13	13.61	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NORFOLK
 PLANT : PORT ROWAN LAGOON
 WORKS NUMBER : 110001113
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.25 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : DEDRICH CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 744

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.27	0.25	0.28	0.29	0.27	0.29	0.26	0.25	0.26	0.25	0.30	0.27	0.27	
LAGOON DISCHARGE	ND	ND	ND	93.35	ND	ND	ND	ND	ND	ND	ND	ND	93.35	
BOD5														
INFLUENT (MG/L)	123.0	104.0	83.0	58.0	150.0	170.0	ND	116.0	173.0	215.0	110.0	39.0	121.9	
EFFLUENT (MG/L)	ND	ND	ND	9.5	ND	ND	ND	ND	ND	ND	ND	ND	9.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	2.75	ND	ND	ND	ND	ND	ND	ND	ND	2.57	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	190.0	198.0	96.0	50.0	132.0	127.0	ND	139.0	213.0	344.0	232.0	28.0	159.0	
EFFLUENT (MG/L)	ND	ND	ND	20.3	ND	ND	ND	ND	ND	ND	ND	ND	20.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	5.88	ND	ND	ND	ND	ND	ND	ND	ND	5.48	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	9.3	4.8	9.5	2.0	8.3	5.4	ND	5.4	8.9	13.4	5.4	2.1	6.8	
EFFLUENT (MG/L)	ND	ND	ND	0.7	ND	ND	ND	ND	ND	ND	ND	ND	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	ND	ND	ND	0.20	ND	ND	ND	ND	ND	ND	ND	ND	0.19	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NORTH DUMFRIES
 PLANT : AYR PV WPCP
 WORKS NUMBER : 110001943
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.18 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT :
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : NITH RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,281

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.47	0.47	0.50	0.50	0.48	0.50	0.50	0.48	0.52	0.39	0.50	0.54	0.49	
BOD5														
INFLUENT (MG/L)	64.0	74.0	95.0	68.0	31.0	91.0	67.0	67.0	37.0	58.0	107.0	28.0	65.6	
EFFLUENT (MG/L)	7.9	2.4	5.3	2.5	7.3	4.5	4.5	8.9	21.5	11.9	7.8	21.0	8.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.71	1.12	2.65	1.25	3.50	2.25	2.25	4.27	11.18	4.64	3.90	11.34	4.31	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	32.0	109.0	126.0	75.0	33.0	102.0	86.0	79.0	61.0	54.0	79.0	25.0	71.8	
EFFLUENT (MG/L)	4.2	4.8	4.5	19.0	14.0	6.1	3.3	3.5	6.0	6.8	4.5	6.8	7.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.97	2.25	2.25	9.50	6.72	3.05	1.65	1.68	3.12	2.65	2.25	3.67	3.43	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.0	5.0	6.0	4.0	3.2	4.2	5.4	4.6	3.5	2.8	5.3	2.9	4.2	
EFFLUENT (MG/L)	0.5	0.5	0.9	0.7	0.7	0.5	0.4	0.4	0.5	0.5	0.6	0.6	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.23	0.23	0.45	0.35	0.33	0.25	0.20	0.19	0.26	0.19	0.30	0.32	0.29	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ORANGEVILLE
 PLANT : ORANGEVILLE WPCP
 WORKS NUMBER : 110000542
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 14.54 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : DUFFERIN
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : CREDIT RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 16,515

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	9.28	8.26	9.61	10.75	10.09	11.71	8.22	7.68	7.19	7.25	9.96	7.94	9.00	
BOD5														
INFLUENT (MG/L)	160.0	174.0	208.0	168.0	162.0	96.0	117.0	131.0	166.0	188.0	189.0	175.0	161.2	
EFFLUENT (MG/L)	2.3	0.5	0.7	1.2	1.9	0.9	0.3	0.7	0.5	0.4	1.5	0.4	0.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	21.34	4.13	6.72	12.90	19.17	10.53	2.46	5.37	3.59	2.90	14.94	3.17	8.10	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	165.0	162.0	151.0	119.0	175.0	161.0	185.0	174.0	190.0	159.0	168.0	159.0	164.0	
EFFLUENT (MG/L)	2.7	2.7	3.4	4.5	3.6	2.7	2.1	2.2	2.3	1.7	2.0	2.3	2.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	25.05	22.30	32.67	48.37	36.32	31.61	17.26	16.89	16.53	12.32	19.92	18.26	24.30	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.1	7.7	5.7	7.1	9.2	4.5	5.7	5.8	6.4	6.7	5.7	6.5	6.3	
EFFLUENT (MG/L)	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.92	0.82	0.96	2.15	1.00	1.17	0.82	1.53	1.43	1.45	1.99	0.79	0.90	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PALMERSTON
 PLANT : PALMERSTON WPCP
 WORKS NUMBER : 110001088
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 :
 :
 DESIGN CAPACITY : 0.68 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : WELLINGTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : WALLACE DRAIN
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,050

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.16	0.91	1.32	1.47	0.88	0.78	0.63	0.68	0.74	0.85	1.36	0.92	0.98	
BOD5														
INFLUENT (MG/L)	130.0	111.0	295.0	78.0	104.0	147.0	137.0	131.0	132.0	182.0	103.0	171.0	143.4	
EFFLUENT (MG/L)	6.1	11.1	5.3	3.3	3.4	1.4	2.1	1.4	1.3	1.6	2.5	6.5	3.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.07	10.10	6.99	4.85	2.99	1.09	1.32	0.95	0.96	1.36	3.40	5.98	3.72	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	113.0	117.0	242.0	84.0	230.0	215.0	152.0	93.0	226.0	256.0	144.0	101.0	164.4	
EFFLUENT (MG/L)	12.2	15.7	11.8	15.6	9.1	9.0	4.8	3.4	5.4	7.5	5.2	5.6	8.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	14.15	14.28	15.57	22.93	8.00	7.02	3.02	2.31	3.99	6.37	7.07	5.15	8.62	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.5	5.6	5.4	4.3	ND	6.6	7.0	5.5	8.2	8.7	4.6	4.3	6.1	
EFFLUENT (MG/L)	0.3	0.3	0.4	0.2	0.3	0.7	0.9	0.5	0.5	0.3	0.4	0.4	0.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.34	0.27	0.52	0.29	0.26	0.54	0.56	0.34	0.37	0.25	0.54	0.36	0.39	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PARIS
 PLANT : PARIS WPCP
 WORKS NUMBER : 110001097
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 7.04 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : BRANT
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : GRAND RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,359

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.05	1.79	2.00	2.11	1.97	2.06	1.90	1.82	1.91	8.39	1.94	1.87	2.48	
BOD5														
INFLUENT (MG/L)	282.0	123.0	152.0	194.0	274.0	144.0	138.0	126.0	ND	174.0	339.0	149.0	190.5	
EFFLUENT (MG/L)	2.9	2.0	0.8	1.3	1.3	1.6	2.2	2.3	7.6	4.6	4.4	4.4	3.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.94	3.58	1.60	2.74	2.56	3.29	4.18	4.18	14.51	38.59	8.53	8.22	7.44	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	171.0	212.0	201.0	146.0	212.0	131.0	171.0	152.0	ND	157.0	498.0	136.0	198.8	
EFFLUENT (MG/L)	4.9	5.0	4.9	5.0	5.9	8.9	6.8	9.3	ND	6.2	9.3	7.6	6.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.04	8.95	9.80	10.55	11.62	18.33	12.92	16.92	ND	52.01	18.04	14.21	16.62	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	9.2	7.6	7.2	8.1	8.3	6.7	7.7	6.2	ND	5.4	12.4	7.4	7.8	
EFFLUENT (MG/L)	0.7	0.7	0.7	0.5	0.6	0.7	0.5	0.7	0.5	0.6	0.6	0.6	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	1.43	1.25	1.40	1.05	1.18	1.44	0.95	1.27	0.95	5.03	1.16	1.12	1.49	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PORT COLBORNE
 PLANT : SEAWAY WPCP
 WORKS NUMBER : 120001906
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 15.00 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : NIAGARA, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : WELLAND CANAL
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 15,825

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	9.79	8.61	9.30	12.65	14.46	14.35	10.17	10.65	12.62	12.10	14.49	8.88	11.51	
BOD5														
INFLUENT (MG/L)	94.0	73.0	107.0	61.0	82.0	67.0	133.0	109.0	111.0	117.0	106.0	114.0	97.8	
EFFLUENT (MG/L)	71.6	20.0	6.7	14.2	20.1	23.3	8.7	25.3	38.5	39.7	33.6	18.8	26.7*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	700.96	172.20	62.31	179.63	290.64	334.35	88.47	269.44	485.87	480.37	486.86	166.94	307.32	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	176.0	105.0	142.0	169.0	195.0	118.0	192.0	177.0	132.0	135.0	139.0	128.0	150.7	
EFFLUENT (MG/L)	5.4	5.3	6.2	7.9	7.1	4.9	3.4	2.8	4.3	4.5	7.1	6.3	5.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	52.86	45.63	57.66	99.93	102.66	70.31	34.57	29.82	54.26	54.45	102.87	55.94	62.15	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.5	8.2	9.2	7.9	6.8	5.8	6.3	6.6	5.5	8.1	6.9	6.4	7.2	
EFFLUENT (MG/L)	0.8	0.4	0.5	0.5	0.5	0.4	0.4	0.6	0.4	0.6	0.4	0.3	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	7.83	3.44	4.65	6.32	7.23	5.74	4.06	6.39	5.04	7.26	5.79	2.66	5.76	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - INFILTRATION PROBLEMS BEING CORRECTED
 SLUDGE DISPOSAL/REMOVAL - UPGRADING SLUDGE THICKENING FACILITIES
 FACILITY EXPANSION/UPGRADING - FILTRATION ADDED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989	1990/04	1990
1989	1990	1991
1989	1990	1991

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SHELBURNE
 PLANT : SHELBURNE WPCP
 WORKS NUMBER : 110000659
 TREATMENT : OXIDATION DITCH
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 2.04 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : DUFFERIN
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BOYNE RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.38	1.27	1.58	1.42	1.70	1.70	1.30	1.27	1.31	1.40	1.68	1.35	1.45	
BOD5														
INFLUENT (MG/L)	237.0	185.0	259.0	219.0	163.0	109.0	144.0	175.0	208.0	240.0	188.0	271.0	199.8	
EFFLUENT (MG/L)	3.9	5.0	8.0	11.4	0.5	0.5	0.5	0.5	0.5	0.5	1.4	3.1	3.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.38	6.35	12.64	16.18	0.85	0.85	0.65	0.63	0.65	0.70	2.35	4.18	4.35	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	162.0	198.0	173.0	116.0	148.0	140.0	194.0	192.0	186.0	149.0	141.0	158.0	163.1	
EFFLUENT (MG/L)	10.6	19.9	25.4	34.9	5.2	3.0	3.4	2.8	3.4	2.6	4.1	9.7	10.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	14.62	25.27	40.13	49.55	8.84	5.10	4.42	3.55	4.45	3.64	6.88	13.09	15.08	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.6	7.2	7.3	6.0	7.3	6.0	8.2	8.6	7.4	7.8	5.5	6.8	7.1	
EFFLUENT (MG/L)	0.4	0.7	0.8	1.8*	0.5	0.6	0.6	0.7	0.5	0.3	0.2	0.4	0.6	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.55	0.88	1.26	2.55	0.85	1.02	0.78	0.88	0.65	0.42	0.33	0.54	0.87	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - PROCESS CONTROL BEING UPGRADED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1990/01	1990/03	1991/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SIMCOE
 PLANT : SIMCOE WPCP
 WORKS NUMBER : 110000677
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 15.45 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LYNN RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 13,355

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	8.28	7.93	7.71	8.44	8.20	8.64	8.05	7.67	8.30	8.18	8.32	7.20	8.08	
BOD5														
INFLUENT (MG/L)	188.0	186.0	166.0	168.0	256.0	173.0	195.0	275.0	155.0	198.0	308.0	487.0	229.6	
EFFLUENT (MG/L)	2.0	1.4	1.0	1.1	0.8	4.6	8.3	6.1	0.7	2.3	0.7	0.7	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	16.56	11.10	7.71	9.28	6.56	39.74	66.81	46.78	5.81	18.81	5.82	5.04	20.20	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	178.0	888.0	189.0	141.0	178.0	165.0	220.0	227.0	165.0	183.0	240.0	421.0	266.3	
EFFLUENT (MG/L)	3.6	3.5	2.3	4.9	4.3	6.5	4.0	4.3	6.8	3.0	1.3	1.2	3.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	29.80	27.75	17.73	41.35	35.26	56.16	32.20	32.98	56.44	24.54	10.81	8.64	30.70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.5	7.5	6.9	6.3	6.8	6.0	7.2	6.7	6.7	7.0	9.0	13.6	7.5	
EFFLUENT (MG/L)	0.2	0.6	0.2	0.1	0.1	0.2	0.6	0.4	0.3	0.4	0.4	0.2	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	1.65	4.75	1.54	0.84	0.82	1.72	4.83	3.06	2.49	3.27	3.32	1.44	2.42	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SOUTH DUMFRIES
 PLANT : ST GEORGE PV WPCP
 WORKS NUMBER : 110003415
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 1.06 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : BRANT
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : FAIRCHILD CREEK (W. BR)
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.48	0.43	0.46	0.43	0.42	0.43	0.38	0.49	0.39	0.42	0.47	0.40	0.43	
BOD5														
INFLUENT (MG/L)	112.0	279.0	114.0	125.0	132.0	134.0	97.0	130.0	93.0	161.0	218.0	170.0	147.1	
EFFLUENT (MG/L)	4.1	0.7	2.1	0.7	0.5	0.8	0.6	0.6	1.2	0.8	0.2	0.3	1.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.96	0.30	0.96	0.30	0.21	0.34	0.22	0.29	0.46	0.33	0.09	0.12	0.47	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	129.0	193.0	188.0	169.0	188.0	196.0	141.0	227.0	235.0	186.0	278.0	249.0	198.3	
EFFLUENT (MG/L)	0.8	3.0	2.0	5.5	2.2	2.8	2.5	2.5	3.0	2.8	1.0	1.1	2.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.38	1.29	0.92	2.36	0.92	1.20	0.95	1.22	1.17	1.17	0.47	0.44	1.03	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.7	8.9	7.6	7.5	8.4	7.8	6.6	6.8	9.8	9.4	11.9	10.5	8.7	
EFFLUENT (MG/L)	0.8	0.9	0.9	0.6	0.5	0.5	0.5	0.4	0.4	0.5	0.6	0.6	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.38	0.38	0.41	0.25	0.21	0.21	0.19	0.19	0.15	0.21	0.28	0.24	0.26	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ST CATHARINES
 PLANT : PORT DALHOUSIE WPCP
 WORKS NUMBER : 120001327
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 61.37 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : NIAGARA, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 60,430

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	41.20	40.30	48.80	50.30	57.20	51.20	40.40	38.30	38.50	41.30	51.50	41.50	45.04	
BOD5														
INFLUENT (MG/L)	133.0	76.0	104.0	56.0	54.0	51.0	50.0	139.0	73.0	282.0	53.0	79.0	95.8	
EFFLUENT (MG/L)	25.0	12.1	11.4	8.5	5.6	13.0	13.1	2.4	49.6	2.8	9.5	18.3	14.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1030.00	487.63	556.32	427.55	320.32	665.60	529.24	91.92	1909.60	115.64	489.25	759.45	644.07	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	122.0	145.0	115.0	142.0	114.0	110.0	107.0	130.0	145.0	148.0	126.0	121.0	127.1	
EFFLUENT (MG/L)	11.3	10.0	11.3	10.0	9.2	9.5	107.0	8.8	8.0	94.1	12.2	9.5	25.1*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	465.56	403.00	551.44	503.00	526.24	486.40	4322.80	337.04	308.00	3886.33	628.30	394.25	1130.50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.5	4.0	5.1	3.0	3.4	3.5	3.5	3.9	3.5	3.9	3.0	4.0	3.7	
EFFLUENT (MG/L)	0.7	0.7	0.7	0.5	0.4	0.6	0.8	0.7	1.9*	0.7	0.5	0.7	0.7	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	28.84	28.21	34.16	25.15	22.88	30.72	32.32	26.81	73.15	28.91	25.75	29.05	31.53	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

EQUIPMENT/MAINTENANCE - EXISTING EQUIPMENT BEING MODIFIED/UPGRADED
 FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING IMPLEMENTED IN PHASES
 FACILITY EXPANSION/UPGRADING - UPGRADING SECONDARY CLARIFIERS
 FACILITY EXPANSION/UPGRADING - UPGRADING DISINFECTION PROCESS
 FACILITY EXPANSION/UPGRADING - UPGRADING HEADWORKS

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989	1990	1991

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : ST CATHARINES
 PLANT : PORT WELLER WPCP
 WORKS NUMBER : 120001318
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 37.50 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : NIAGARA, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : PORT WELLER HARBOUR
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 75,690

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	40.00	40.50	49.86	40.86	57.10	49.73	48.50	43.10	40.10	41.90	47.40	41.00	45.00	
BOD5														
INFLUENT (MG/L)	99.0	97.0	96.0	41.0	ND	66.0	87.0	134.0	109.0	128.0	156.0	518.0	139.2	
EFFLUENT (MG/L)	11.3	14.3	43.5	38.0	ND	7.0	53.7	15.6	24.3	18.4	49.0	14.2	26.3*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	452.00	579.15	2168.91	1552.68	ND	348.11	2604.45	672.36	974.43	770.96	2322.60	582.20	1183.50	
LOADING LIMIT (KG/D)														
SUSPENDED SOLIDS														
INFLUENT (MG/L)	232.0	260.0	243.0	180.0	213.0	199.0	236.0	242.0	284.0	320.0	223.0	257.0	240.8	
EFFLUENT (MG/L)	16.3	15.8	15.9	19.0	22.5	10.6	11.3	11.6	12.5	14.8	21.2	14.8	15.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	652.00	639.90	792.77	776.34	1284.75	527.13	548.05	499.96	501.25	620.12	1004.88	606.80	697.50	
LOADING LIMIT (KG/D)														
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.3	5.3	7.4	3.9	7.9	4.8	5.7	7.0	4.6	5.4	4.1	7.8	5.9	
EFFLUENT (MG/L)	0.9	0.6	0.8	1.0	0.6	0.6	1.0	0.8	0.8	0.7	0.7	0.7	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	36.00	24.30	39.88	40.86	34.26	29.83	48.50	34.48	32.08	29.33	33.18	28.70	36.00	
LOADING LIMIT (KG/D)														

SUMMARY

PARAM	CRITERIA	LOADING	COMPLIES WITH CONC	LOADING
BOD	25.0 MG/L	NA	NO	NA
SS	25.0 MG/L	NA	YES	NA
TP	1.0 MG/L	NA	YES	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - SEWAGE UPGRADE UNDERWAY
 EQUIPMENT/MAINTENANCE - EXISTING EQUIPMENT BEING MODIFIED/UPGRADED
 FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING IMPLEMENTED IN PHASES
 FACILITY EXPANSION/UPGRADING - UPGRADE SECONDARY CLARIFIERS
 FACILITY EXPANSION/UPGRADING - UPGRADE HEADWORKS

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989	1990/10	1991

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ST CATHARINES
 PLANT : PORT WELLER WPCP
 WORKS NUMBER : 120001318
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 37.50 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : NIAGARA, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : PORT WELLER HARBOUR
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 75,690

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	40.00	40.50	49.86	40.86	57.10	49.73	48.50	43.10	40.10	41.90	47.40	41.00	45.00	
BOD5														
INFLUENT (MG/L)	99.0	97.0	96.0	41.0	ND	66.0	87.0	134.0	109.0	128.0	156.0	518.0	139.2	
EFFLUENT (MG/L)	11.3	14.3	43.5	38.0	ND	7.0	53.7	15.6	24.3	18.4	49.0	14.2	26.3*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	452.00	579.15	2168.91	1552.68	ND	348.11	2604.45	672.36	974.43	770.96	2322.60	582.20	1183.50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	232.0	260.0	243.0	180.0	213.0	199.0	236.0	242.0	284.0	320.0	223.0	257.0	240.8	
EFFLUENT (MG/L)	16.3	15.8	15.9	19.0	22.5	10.6	11.3	11.6	12.5	14.8	21.2	14.8	15.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	652.00	639.90	792.77	776.34	1284.75	527.13	548.05	499.96	501.25	620.12	1004.88	606.80	697.50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.3	5.3	7.4	3.9	7.9	4.8	5.7	7.0	4.6	5.4	4.1	7.8	5.9	
EFFLUENT (MG/L)	0.9	0.6	0.8	1.0	0.6	0.6	1.0	0.8	0.8	0.7	0.7	0.7	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	36.00	24.30	39.88	40.86	34.26	29.83	48.50	34.48	32.08	29.33	33.18	28.70	36.00	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - SEWAGE UPGRADE UNDERWAY
 EQUIPMENT/MAINTENANCE - EXISTING EQUIPMENT BEING MODIFIED/UPGRADED
 FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING IMPLEMENTED IN PHASES
 FACILITY EXPANSION/UPGRADING - UPGRADING SECONDARY CLARIFIERS
 FACILITY EXPANSION/UPGRADING - UPGRADING HEADWORKS

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989	1990/10	1991

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WATERLOO
 PLANT : WATERLOO WPCP
 WORKS NUMBER : 110000793
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 72.73 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT :
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : GRAND RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 66,627

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	42.22	38.37	42.16	39.21	37.14	40.10	31.69	33.25	34.08	35.95	37.54	33.38	37.09	
BOD5														
INFLUENT (MG/L)	177.0	198.0	154.0	180.0	302.0	ND	ND	ND	ND	202.0	229.0	240.0	210.3	
EFFLUENT (MG/L)	11.1	13.6	17.0	18.0	8.0	6.0	6.0	10.0	9.2	7.9	11.9	11.7	10.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	468.64	521.83	716.72	705.78	297.12	240.60	190.14	332.50	313.53	284.00	446.72	390.54	404.28	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	461.0	351.0	377.0	307.0	495.0	ND	ND	ND	ND	268.0	421.0	262.0	367.8	
EFFLUENT (MG/L)	25.9	26.6	35.0	39.0	14.0	9.0	10.0	16.0	19.5	15.3	22.5	18.1	20.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1093.49	1020.64	1475.60	1529.19	519.96	360.90	316.90	532.00	664.56	550.03	844.65	604.17	775.18	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.4	6.2	6.6	5.5	9.0	ND	ND	ND	ND	6.7	6.9	8.4	7.0	
EFFLUENT (MG/L)	1.3*	1.1*	1.5*	1.4*	0.7	0.8	1.0	0.7	1.0	0.8	1.1*	0.8	1.0	5
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	54.88	42.20	63.24	54.89	25.99	32.08	31.69	23.27	34.08	28.76	41.29	26.70	37.09	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - CONSTRUCTION COMPLETE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989/08	1990	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WELLAND
 PLANT : WELLAND WPCP
 WORKS NUMBER : 120001309
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 45.46 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : NIAGARA, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : WELLAND RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 47,205

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	32.56	28.46	42.49	40.22	41.91	40.31	32.33	25.25	38.54	30.61	42.37	29.08	35.34	
BOD5														
INFLUENT (MG/L)	109.0	53.0	31.0	64.0	61.0	42.0	77.0	134.0	142.0	101.0	97.0	223.0	94.5	
EFFLUENT (MG/L)	14.9	12.5	8.9	9.7	11.8	12.3	13.3	29.5	33.7	59.5	14.5	13.0	19.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	485.14	355.75	378.16	390.13	494.53	495.81	429.98	744.87	1298.79	1821.29	614.36	378.04	689.13	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	168.0	159.0	132.0	189.0	190.0	119.0	131.0	193.0	298.0	205.0	138.0	326.0	187.3	
EFFLUENT (MG/L)	13.9	11.3	11.0	12.4	21.5	19.4	12.4	17.6	28.4	56.6	29.0	25.1	21.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	452.58	321.59	467.39	498.72	901.06	782.01	400.89	444.40	1094.53	1732.52	1228.73	729.90	763.34	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.0	4.8	2.6	6.2	5.2	3.3	6.7	5.1	11.7	9.7	5.9	5.2	5.9	
EFFLUENT (MG/L)	0.6	1.0	3.4*	0.2	0.5	0.7	0.6	0.6	0.7	1.5*	1.0	1.0	1.0	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	19.53	28.46	144.46	8.04	20.95	28.21	19.39	15.15	26.97	45.91	42.37	29.08	35.34	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - UPGRADING BIOLOGICAL PROCESS
 FACILITY EXPANSION/UPGRADING - UPGRADING SECONDARY CLARIFIERS
 FACILITY EXPANSION/UPGRADING - UPGRADING PRIMARY CLARIFIERS
 FACILITY EXPANSION/UPGRADING - UPGRADING DISINFECTION PROCESS
 FACILITY EXPANSION/UPGRADING - NITRIFICATION ADDED
 FACILITY EXPANSION/UPGRADING - CHLORINATION ADDED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988	1990	1991
1988	1990	1991
1988	1990	1991
1988	1990	1991
1988	1990	1991
1988	1990	1991

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WELLESLEY
 PLANT : WELLESLEY WPCP
 WORKS NUMBER : 110001578
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.50 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT :
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : NITH RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 950

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.49	0.31	0.43	0.48	0.34	0.35	0.21	0.21	0.24	0.29	0.45	0.35	0.35	
BOD5														
INFLUENT (MG/L)	147.0	135.0	202.0	202.0	200.0	49.0	174.0	110.0	185.0	357.0	110.0	110.0	165.1	
EFFLUENT (MG/L)	2.2	2.6	1.4	1.3	1.8	0.5	3.3	0.5	0.5	2.7	0.8	0.4	1.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.07	0.80	0.60	0.62	0.61	0.17	0.69	0.10	0.12	0.78	0.36	0.14	0.53	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	136.0	129.0	330.0	128.0	182.0	133.0	183.0	179.0	222.0	394.0	140.0	176.0	194.3	
EFFLUENT (MG/L)	5.5	3.9	6.0	4.9	5.5	3.5	3.2	4.7	5.5	5.0	4.7	4.7	4.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.69	1.20	2.58	2.35	1.87	1.22	0.67	0.98	1.32	1.45	2.11	1.64	1.68	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	5.4	9.4	4.5	7.1	4.2	7.2	6.1	6.1	9.2	4.7	6.2	6.3	
EFFLUENT (MG/L)	0.3	0.4	0.3	0.7	0.5	0.6	0.6	0.8	0.9	0.1	0.7	0.4	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.14	0.12	0.12	0.33	0.17	0.21	0.12	0.16	0.21	0.02	0.31	0.14	0.18	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WEST LINCOLN
 PLANT : SMITHVILLE LAGOON
 WORKS NUMBER : 120001229
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 :
 DESIGN CAPACITY : 1.56 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT : NIAGARA, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : TWENTY MILE CREEK
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,980

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.90	0.70	1.15	1.12	0.22	ND	ND	ND	ND	ND	ND	ND	0.82	
LAGOON DISCHARGE	ND	ND	18.18	105.02	50.01	ND	ND	ND	ND	ND	ND	ND	57.74	
BOD5														
INFLUENT (MG/L)	98.0	201.0	150.0	91.0	81.0	ND	ND	ND	ND	ND	ND	ND	124.2	
EFFLUENT (MG/L)	ND	ND	ND	16.5	19.6	ND	ND	ND	ND	ND	ND	ND	18.1	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	18.48	4.31	ND	ND	ND	ND	ND	ND	ND	14.84	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	91.0	269.0	143.0	89.0	117.0	ND	ND	ND	ND	ND	ND	ND	141.8	
EFFLUENT (MG/L)	ND	ND	ND	17.0	56.2	ND	ND	ND	ND	ND	ND	ND	36.6	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	19.04	12.36	ND	ND	ND	ND	ND	ND	ND	30.01	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.1	8.7	7.0	5.0	4.1	ND	ND	ND	ND	ND	ND	ND	6.0	
EFFLUENT (MG/L)	ND	ND	ND	5.3	4.8	ND	ND	ND	ND	ND	ND	ND	5.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	5.93	1.05	ND	ND	ND	ND	ND	ND	ND	4.18	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - PHASING OUT EXISTING FACILITY

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WILMOT
 PLANT : BADEN WPCP
 WORKS NUMBER : 110001710
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.92 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT :
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BADEN CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,152

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.75	0.60	0.77	0.82	0.75	0.80	0.53	0.49	0.52	0.56	0.75	0.55	0.66	
BOD5														
INFLUENT (MG/L)	206.0	400.0	229.0	230.0	363.0	581.0	359.0	332.0	463.0	237.0	350.0	482.0	352.7	
EFFLUENT (MG/L)	3.9	2.0	8.5	2.7	5.4	10.9	9.5	1.4	1.3	1.1	1.8	2.2	4.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.92	1.20	6.54	2.21	4.05	8.72	5.03	0.68	0.67	0.61	1.35	1.21	2.77	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	206.0	1,227.0	284.0	1,080.0	500.0	341.0	383.0	494.0	508.0	272.0	419.0	617.0	527.6	
EFFLUENT (MG/L)	5.7	7.5	9.8	18.0	11.0	16.3	28.9	4.3	4.8	3.4	5.8	5.4	10.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.27	4.50	7.54	14.76	8.25	13.04	15.31	2.10	2.49	1.90	4.35	2.97	6.67	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.5	9.6	6.8	6.9	10.5	11.3	10.5	12.5	9.9	9.9	8.8	14.2	10.0	
EFFLUENT (MG/L)	0.6	0.4	0.4	0.5	0.4	0.7	0.7	0.6	0.5	0.7	0.7	0.6	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.45	0.24	0.30	0.41	0.30	0.56	0.37	0.29	0.26	0.39	0.52	0.33	0.40	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WILMOT
 PLANT : NEW HAMBURG LAGOON
 WORKS NUMBER : 110000506
 TREATMENT : AERATED CELL PLUS LAGOON
 : EFFLUENT POLISHING
 : CONTINUOUS DISCHARGE
 DESIGN CAPACITY : 2.72 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT :
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : NITH RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,978

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.55	1.29	1.57	1.82	1.52	1.65	1.16	1.13	1.11	1.17	1.52	1.20	1.39	
LAGOON DISCHARGE	ND	ND	ND	57.23	65.40	43.90	30.13	32.48	36.53	27.59	42.33	20.23	39.54	
BOD5														
INFLUENT (MG/L)	112.0	164.0	103.0	176.0	104.0	141.0	112.0	176.0	143.0	164.0	128.0	172.0	141.3	
EFFLUENT (MG/L)	ND	ND	ND	3.2	1.6	0.7	1.1	1.0	0.3	2.6	1.9	0.9	1.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	5.82	2.43	1.15	1.27	1.13	0.33	3.04	2.88	1.08	2.09	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	135.0	233.0	213.0	240.0	245.0	180.0	178.0	211.0	233.0	183.0	154.0	259.0	205.3	
EFFLUENT (MG/L)	ND	ND	ND	3.8	3.0	4.8	3.0	3.8	4.5	1.7	1.5	3.3	3.3	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	6.91	4.56	7.92	3.48	4.29	4.99	1.98	2.28	3.96	4.59	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	14.4	10.0	7.2	8.7	6.3	8.5	10.0	9.9	16.0	14.3	9.1	19.5	11.2	
EFFLUENT (MG/L)	ND	ND	ND	0.5	0.3	0.4	0.5	0.4	0.3	0.5	0.6	0.6	0.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	0.91	0.45	0.66	0.58	0.45	0.33	0.58	0.91	0.72	0.70	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : WOOLWICH
 PLANT : ELMIRA WPCP (COMBINED FLOW)
 WORKS NUMBER : 110000150
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 4.54 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT :
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : CANAGAGIGUE CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 7,090

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.37	3.83	5.38	5.57	5.67	6.59	5.66	5.08	4.96	4.01	4.75	3.07	5.00	
BOD5														
INFLUENT (MG/L)	241.0	210.0	350.0	264.0	249.0	368.0	215.0	298.0	322.0	311.0	209.0	192.0	269.1	
EFFLUENT (MG/L)	2.6	3.3	4.0	3.1	2.6	2.9	0.8	2.8	1.8	5.5	6.4	3.6	3.3	
CONCENTRATION LIMIT (MG/L)													7.5	
LOADING (KG/D)	13.96	12.63	21.52	17.26	14.74	19.11	4.52	14.22	8.92	22.05	30.40	11.05	16.50	
LOADING LIMIT (KG/D)													34.02	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	232.0	222.0	359.0	260.0	346.0	497.0	279.0	352.0	419.0	218.0	99.0	110.0	282.8	
EFFLUENT (MG/L)	10.2	10.2	11.1	9.0	16.1	10.6	9.8	7.2	11.2	6.8	8.2	5.6	9.7	
CONCENTRATION LIMIT (MG/L)													15.0	
LOADING (KG/D)	54.77	39.06	59.71	50.13	91.28	69.85	55.46	36.57	55.55	27.26	38.95	17.19	48.50	
LOADING LIMIT (KG/D)													68.04	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	5.4	8.5	5.6	5.7	26.1	ND	10.2	9.4	7.4	ND	6.5	9.1	
EFFLUENT (MG/L)	0.3	0.5	0.5	0.3	0.6	0.7	1.3	0.5	0.4	0.8	1.2	1.2	0.7	
CONCENTRATION LIMIT (MG/L)													1.0	
LOADING (KG/D)	1.61	1.91	2.69	1.67	3.40	4.61	7.35	2.54	1.98	3.20	5.70	3.68	3.50	
LOADING LIMIT (KG/D)													4.53	

SUMMARY

PARAM	CRITERIA	LOADING	CONC	LOADING	COMPLIES WITH
BOD	7.5 MG/L	34.02 KG/D	YES	YES	YES
SS	15.0 MG/L	68.04 KG/D	YES	YES	YES
TP	1.0 MG/L	4.53 KG/D	YES	YES	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE
 FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING IMPLEMENTED IN PHASES

START DATE END DATE ANTICIPATED COMPLIANCE
 1990/09 1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WOOLWICH
 PLANT : ELMIRA WPCP (COMBINED FLOW)
 WORKS NUMBER : 110000150
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 4.54 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT :
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : CANAGAGIGUE CREEK
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 7,090

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.37	3.83	5.38	5.57	5.67	6.59	5.66	5.08	4.96	4.01	4.75	3.07	5.00	
BOD5														
INFLUENT (MG/L)	241.0	210.0	350.0	264.0	249.0	368.0	215.0	298.0	322.0	311.0	209.0	192.0	269.1	
EFFLUENT (MG/L)	2.6	3.3	4.0	3.1	2.6	2.9	0.8	2.8	1.8	5.5	6.4	3.6	3.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	13.96	12.63	21.52	17.26	14.74	19.11	4.52	14.22	8.92	22.05	30.40	11.05	16.50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	232.0	222.0	359.0	260.0	346.0	497.0	279.0	352.0	419.0	218.0	99.0	110.0	282.8	
EFFLUENT (MG/L)	10.2	10.2	11.1	9.0	16.1	10.6	9.8	7.2	11.2	6.8	8.2	5.6	9.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	54.77	39.06	59.71	50.13	91.28	69.85	55.46	36.57	55.55	27.26	38.95	17.19	48.50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	5.4	8.5	5.6	5.7	26.1	ND	10.2	9.4	7.4	ND	6.5	9.1	
EFFLUENT (MG/L)	0.3	0.5	0.5	0.3	0.6	0.7	1.3*	0.5	0.4	0.8	1.2*	1.2*	0.7	3
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.61	1.91	2.69	1.67	3.40	4.61	7.35	2.54	1.98	3.20	5.70	3.68	3.50	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE
 FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING IMPLEMENTED IN PHASES

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1990/09	1990
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WOOLWICH
 PLANT : ST.JACOBS PV WPCP
 WORKS NUMBER : 110001211
 TREATMENT : OXIDATION DITCH
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.95 (1000 M3)

REGION : WEST CENTRAL
 DISTRICT :
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : CONESTOGO RIVER
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,266

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.83	0.67	0.90	0.90	0.71	0.78	0.55	0.70	0.66	0.82	1.05	0.89	0.79	
BOD5														
INFLUENT (MG/L)	70.0	162.0	134.0	66.0	203.0	197.0	86.0	195.0	307.0	197.0	433.0	509.0	213.3	
EFFLUENT (MG/L)	4.0	4.5	3.3	4.7	5.4	6.6	1.9	10.5	1.5	5.0	6.4	29.1	6.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.32	3.01	2.97	4.23	3.83	5.14	1.04	7.35	0.99	4.10	6.72	25.89	5.45	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	229.0	161.0	171.0	182.0	209.0	179.0	193.0	225.0	232.0	307.0	367.0	210.0	222.1	
EFFLUENT (MG/L)	12.1	10.1	9.1	14.8	24.9	29.7	9.8	13.7	13.3	17.6	47.9	47.1	20.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.04	6.76	8.19	13.32	17.67	23.16	5.39	9.59	8.77	14.43	50.29	41.91	16.43	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.7	4.7	5.8	4.0	4.8	5.9	6.8	8.9	7.5	6.9	7.8	7.4	6.4	
EFFLUENT (MG/L)	0.5	0.4	0.5	0.5	0.6	2.3*	0.8	1.0	0.7	0.9	0.9	1.5*	0.9	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.41	0.26	0.45	0.45	0.42	1.79	0.44	0.70	0.46	0.73	0.94	1.33	0.71	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1993/05	1994	

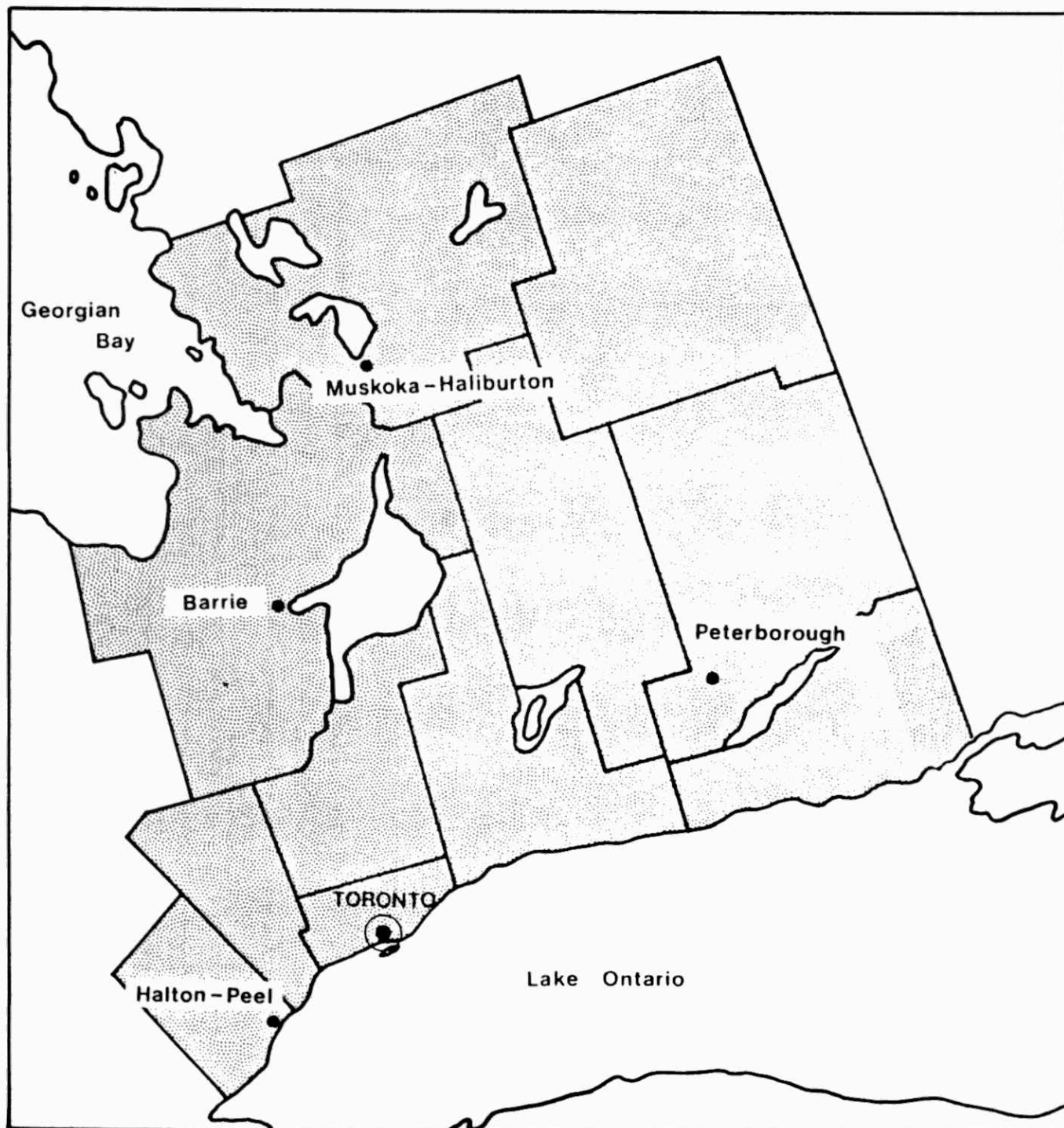
Central Region

③



Ministry
of the
Environment

Ontario



REGIONAL OFFICE

Toronto
7 Overlea Blvd.
M4E 1A8
(416) 424-3000

DISTRICT OFFICES

Barrie
12 Fairview Road
L4N 4P3
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Halton-Peel
1235 Trafalgar Rd., Suite 401
Oakville
L6H 3P1
(416) 844-5747

Metro Toronto East
7 Overlea Blvd.
M4E 1A8
(416) 467-3013

Metro Toronto West
7 Overlea Blvd.
M4E 1A8
(416) 467-3007

Muskoka-Haliburton
483 Bethune Dr.
Gravenhurst
P0C 1G0
(705) 687-6647

Peterborough
139 George St. North
K9J 3G6
(705) 743-2792

York-Durham
7 Overlea Blvd.
M4H 1E8
(416) 467-3009

CENTRAL SUMMARY - 1989

Treatment Type	Number			Design Capacity (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Conventional Activated Sludge	3	26	29	399.14	2,139.71	2,538.85
Contact Stabilization	1	2	3	1.05	4.50	5.55
Extended Aeration	11	13	24	35.05	35.11	70.16
High Rate	0	1	1	-	9.09	9.09
Oxidation Ditch	3	0	3	2.79	-	2.79
Communal Septic Tank	0	1	1	-	0.09	0.09
Convent. Lagoon Continuous	0	4	4	-	19.15	19.15
Conventional Lagoon Seasonal	1	7	8	0.58	11.25	11.83
Lagoon and Spray	1	0	1	0.61	-	0.61
Aerated Cell Plus Lagoon	0	2	2	-	4.91	4.91
Exfiltration Lagoon	1	0	1	1.36	-	1.36
TOTALS	21	56	77	440.58	2,223.81	2,664.39

1000M3/D: Thousands of cubic meters per day
ADF: Average Daily Flow

CENTRAL SUMMARY - 1989

Treatment Type	Number			Average Daily Flow (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Conventional Activated Sludge	3	26	29	350.28	1,905.15	2,255.43
Contact Stabilization	1	2	3	0.78	4.52	5.30
Extended Aeration	11	13	24	15.46	18.79	34.25
High Rate	0	1	1	0.00	5.30	5.30
Oxidation Ditch	3	0	3	2.44	0.00	2.44
Communal Septic Tank	0	1	1	0.00	0.12	0.12
Convent. Lagoon Continuous	0	4	4	0.00	13.78	13.78
Conventional Lagoon Seasonal	1	7	8	0.82	8.25	9.07
Lagoon and Spray	1	0	1	0.32	0.00	0.32
Aerated Cell Plus Lagoon	0	2	2	0.00	4.48	4.48
Exfiltration Lagoon	1	0	1	0.80	0.00	0.80
TOTALS	21	56	77	370.90	1,960.39	1,331.27

1000M3/D: Thousands of cubic meters per day

ADF: Average Daily Flow

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ALLISTON
 PLANT : ALLISTON WPCP
 WORKS NUMBER : 110001220
 TREATMENT : EXTENDED AERATION
 :
 :
 DESIGN CAPACITY : 3.50 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BOYNE RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,674

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.33	3.12	3.36	3.28	3.46	3.65	3.45	3.76	3.75	3.56	3.70	3.20	3.47	
<u>BOD5</u>														
INFLUENT (MG/L)	130.5	181.0	159.5	123.0	138.0	138.5	114.0	110.5	125.5	156.0	160.0	275.0	151.0	
EFFLUENT (MG/L)	27.1	19.5	36.5	26.4	16.3	13.7	9.1	18.0	6.1	5.7	31.7	19.1	19.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	90.24	60.84	122.64	86.59	56.39	50.00	31.39	67.68	22.87	20.29	117.29	61.12	66.28	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	107.0	123.5	191.5	114.5	118.5	152.0	165.5	126.0	159.0	169.0	143.0	249.0	151.5	
EFFLUENT (MG/L)	26.5	21.8	22.5	22.5	12.5	10.2	10.8	24.0	10.3	15.6	37.2	19.2	19.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	88.24	68.01	75.60	73.80	43.25	37.23	37.26	90.24	38.62	55.53	137.64	61.44	67.32	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	8.0	10.1	9.8	6.7	8.2	7.1	6.0	9.8	7.5	8.3	10.1	11.3	8.6	
EFFLUENT (MG/L)	6.2	5.7	6.4	5.4	5.6	5.5	5.2	4.6	5.8	6.6	6.3	6.6	5.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	20.64	17.78	21.50	17.71	19.37	20.07	17.94	17.29	21.75	23.49	23.31	21.12	20.13	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988/08	1990/07	1990/08

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ANSON HINDON MINDEN
 PLANT : MINDEN WPCP
 WORKS NUMBER : 110002390
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 0.94 (1000 M3)

REGION : CENTRAL
 DISTRICT : HALIBURTON
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : GULL RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 984

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.58	0.57	0.61	0.69	0.92	0.62	0.58	0.60	0.59	0.64	0.71	0.76	0.66	
BOD5														
INFLUENT (MG/L)	223.0	125.0	134.0	64.0	83.0	124.0	113.0	39.0	82.0	156.0	102.0	94.0	111.6	
EFFLUENT (MG/L)	1.8	0.5	1.8	0.5	0.8	0.5	0.8	0.2	0.2	0.2	0.2	0.2	0.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.04	0.28	1.09	0.34	0.73	0.31	0.46	0.12	0.11	0.12	0.14	0.15	0.40	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	148.0	209.0	228.0	75.0	87.0	213.0	166.0	78.0	112.0	203.0	127.0	116.0	146.8	
EFFLUENT (MG/L)	1.5	7.5	9.5	2.0	19.8	1.8	2.8	2.8	2.5	1.6	0.5	0.8	4.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.87	4.27	5.79	1.38	18.21	1.11	1.62	1.68	1.47	1.02	0.35	0.60	2.90	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	9.7	5.6	6.2	3.2	4.4	5.5	5.7	3.2	5.3	6.0	4.8	4.9	5.4	
EFFLUENT (MG/L)	0.2	0.2	0.3	0.1	0.1	0.2	0.9	0.2	0.4	0.2	0.2	0.1	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.11	0.11	0.18	0.06	0.09	0.12	0.52	0.12	0.23	0.12	0.14	0.07	0.20	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : BARRIE
 PLANT : BARRIE WPCP
 WORKS NUMBER : 120000578
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 27.27 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : KEMPENFELT BAY L. SIMCOE
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 50,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	27.98	28.59	30.94	32.95	34.21	35.51	31.93	32.53	34.58	32.60	32.68	32.97	32.29	
BOD5														
INFLUENT (MG/L)	277.0	200.0	211.0	207.0	184.0	206.0	131.0	176.0	158.0	200.0	187.0	135.0	189.3	
EFFLUENT (MG/L)	3.4	4.7	6.5	3.3	5.5	20.4	9.1	7.6	10.8	5.5	4.6	7.3	7.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	95.13	134.37	201.11	108.73	188.15	724.40	290.56	247.22	373.46	179.30	150.32	240.68	238.95	
LOADING LIMIT (KG/D)														
SUSPENDED SOLIDS														
INFLUENT (MG/L)	278.0	269.0	266.0	219.0	233.0	265.0	192.0	196.0	196.0	203.0	232.0	201.0	229.2	
EFFLUENT (MG/L)	4.6	4.8	6.7	5.2	3.6	20.4	13.0	8.5	9.8	8.2	8.4	12.7	8.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	128.70	137.23	207.29	171.34	123.15	724.40	415.09	276.50	338.88	267.32	274.51	418.71	284.15	
LOADING LIMIT (KG/D)														
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.8	6.3	6.7	5.4	5.3	5.2	5.5	5.1	4.5	6.0	5.6	2.9	5.4	
EFFLUENT (MG/L)	0.2	0.2	0.2	0.2	0.1	0.9	0.5	0.4	0.3	0.3	0.2	0.3	0.3	
CONCENTRATION LIMIT (MG/L)													0.3	
LOADING (KG/D)	5.59	5.71	6.18	6.59	3.42	31.95	15.96	13.01	10.37	9.78	6.53	9.89	9.69	
LOADING LIMIT (KG/D)													13.91	

SUMMARY

PARAM	CRITERIA	LOADING	COMPLIES WITH CONC	LOADING
BOD	NA	NA	NA	NA
SS	NA	NA	NA	NA
TP	0.3 MG/L	13.91 KG/D	YES	YES

NOTE:

BOD - HAS NO CRITERIA
 SS - HAS NO CRITERIA
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BARRIE
 PLANT : BARRIE WPCP
 WORKS NUMBER : 120000578
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 27.27 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : KEMPENFELT BAY L. SIMCOE
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 50,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	27.98	28.59	30.94	32.95	34.21	35.51	31.93	32.53	34.58	32.60	32.68	32.97	32.29	
BOD5														
INFLUENT (MG/L)	277.0	200.0	211.0	207.0	184.0	206.0	131.0	176.0	158.0	200.0	187.0	135.0	189.3	
EFFLUENT (MG/L)	3.4	4.7	6.5	3.3	5.5	20.4	9.1	7.6	10.8	5.5	4.6	7.3	7.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	95.13	134.37	201.11	108.73	188.15	724.40	290.56	247.22	373.46	179.30	150.32	240.68	238.95	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	278.0	269.0	266.0	219.0	233.0	265.0	192.0	196.0	196.0	203.0	232.0	201.0	229.2	
EFFLUENT (MG/L)	4.6	4.8	6.7	5.2	3.6	20.4	13.0	8.5	9.8	8.2	8.4	12.7	8.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	128.70	137.23	207.29	171.34	123.15	724.40	415.09	276.50	338.88	267.32	274.51	418.71	284.15	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.8	6.3	6.7	5.4	5.3	5.2	5.5	5.1	4.5	6.0	5.6	2.9	5.4	
EFFLUENT (MG/L)	0.2	0.2	0.2	0.2	0.1	0.9	0.5	0.4	0.3	0.3	0.2	0.3	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	5.59	5.71	6.18	6.59	3.42	31.95	15.96	13.01	10.37	9.78	6.53	9.89	9.69	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BEETON
 PLANT : BEETON LAGOON
 WORKS NUMBER : 110000917
 TREATMENT : EXFILTRATION LAGOON
 :
 :
 DESIGN CAPACITY : 1.36 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : NO DISC.TO SURFACE WATER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,105

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.69	0.61	0.61	0.78	0.89	0.82	0.73	0.78	0.86	0.84	1.08	0.87	0.80	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	120.0	171.5	221.5	46.5	133.5	103.5	130.0	201.0	202.5	127.5	138.0	120.5	143.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	228.5	125.0	468.0	131.5	293.0	107.5	140.0	171.0	152.0	129.0	200.0	144.5	190.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.3	8.6	9.8	7.6	4.2	4.6	7.9	6.7	6.5	5.8	4.1	5.5	6.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:

BOD - HAS NO CRITERIA
 SS - HAS NO CRITERIA
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BICROFT
 PLANT : CARDIFF LAGOON
 WORKS NUMBER : 120001032
 TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
 :
 :
 DESIGN CAPACITY : 0.45 (1000 M3)

REGION : CENTRAL
 DISTRICT : HALIBURTON
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : MINK CR. TO PAUDASH LAKE
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 595

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	0.50	0.87	0.96	0.45	0.31	0.37	0.76	0.50	0.75	0.61	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	135.0	10.0	148.0	ND	14.0	133.0	17.0	106.0	96.0	66.0	80.6	
EFFLUENT (MG/L)	ND	ND	2.4	12.3	17.7	ND	2.8	5.7	6.8	4.8	4.6	1.5	6.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	6.15	15.39	ND	1.26	1.76	2.51	3.64	2.30	1.12	3.97	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	53.0	84.0	ND	18.0	158.0	27.0	122.0	726.0	90.0	159.8	
EFFLUENT (MG/L)	ND	ND	42.0	17.0	26.0	ND	2.5	11.0	13.0	5.5	11.4	13.2	15.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	8.50	22.62	ND	1.12	3.41	4.81	4.18	5.70	9.90	9.58	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	2.4	1.6	0.9	ND	1.4	7.4	1.1	5.2	2.4	1.8	2.7	
EFFLUENT (MG/L)	ND	ND	0.7	1.9	0.8	ND	1.2	0.2	0.1	0.1	0.2	0.2	0.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	0.95	0.69	ND	0.54	0.06	0.03	0.07	0.10	0.15	0.37	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW
 FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1992
 1992

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BOBCAYGEON
 PLANT : BOBCAYGEON WPCP(SUMM.POP.SERVED(2480)
 WORKS NUMBER : 110002498
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 3.05 (1000 M3)

REGION : CENTRAL
 DISTRICT : VICTORIA
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BOBCAYGEON RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,610

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.65	0.63	0.77	1.16	0.93	0.84	1.08	0.96	0.87	0.88	1.06	1.01	0.90	
<u>BOD5</u>														
INFLUENT (MG/L)	123.0	59.0	165.0	81.0	73.0	91.0	149.0	164.0	84.0	95.0	160.0	ND	113.1	
EFFLUENT (MG/L)	3.8	6.3	10.5	13.3	19.7	4.2	3.6	2.4	2.0	0.2	4.0	ND	6.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.47	3.96	8.08	15.42	18.32	3.52	3.88	2.30	1.74	0.17	4.24	ND	5.76	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	67.0	93.0	164.0	68.0	63.0	112.0	117.0	90.0	71.0	74.0	91.0	ND	91.8	
EFFLUENT (MG/L)	6.6	8.0	14.0	13.0	11.5	9.4	5.5	6.5	5.5	5.0	5.2	ND	8.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.29	5.04	10.78	15.08	10.69	7.89	5.94	6.24	4.78	4.40	5.51	ND	7.38	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	6.1	ND	4.9	3.0	3.3	3.2	5.5	5.2	4.5	4.1	4.3	ND	4.4	
EFFLUENT (MG/L)	0.2	0.2	0.5	0.3	0.4	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.13	0.12	0.38	0.34	0.37	0.16	0.21	0.09	0.08	0.17	0.21	0.30	0.18	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BRACEBRIDGE
 PLANT : BRACEBRIDGE LAGOON
 WORKS NUMBER : 120001979
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 2.06 (1000 M3)

REGION : CENTRAL
 DISTRICT : MUSKOKA, DIST. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : MUSKOKA RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED :

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.18	0.14	0.17	0.17	0.19	0.25	ND	ND	ND	0.05	0.70	0.03	0.21	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.18	60.93	40.80	38.30	
BOD5														
INFLUENT (MG/L)	210.0	144.0	104.0	109.0	129.0	135.0	ND	ND	ND	213.0	126.0	189.0	151.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	3.4	12.2	6.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.13	2.38	0.36	1.28	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	156.0	156.0	101.0	114.0	121.0	119.0	ND	ND	ND	172.0	93.0	115.0	127.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9	4.9	12.9	8.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.34	3.43	0.38	1.72	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.9	6.7	5.4	4.4	4.9	5.9	ND	ND	ND	4.6	4.4	6.3	5.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1	0.1	0.4	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND		0.07	0.01	0.04	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BRACEBRIDGE
 PLANT : BRACEBRIDGE WPCP
 WORKS NUMBER : 110000034
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 3.19 (1000 M3)

REGION : CENTRAL
 DISTRICT : MUSKOKA, DIST. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : MUSKOKA RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 6,408

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.77	1.74	1.60	2.03	2.13	2.29	1.78	1.84	1.75	1.76	2.07	1.81	1.88	
BOD5														
INFLUENT (MG/L)	210.0	144.0	104.0	109.0	129.0	135.0	168.0	188.0	272.0	213.0	126.0	189.0	165.6	
EFFLUENT (MG/L)	4.2	2.7	1.5	0.5	1.2	3.0	5.3	1.1	0.9	1.2	0.5	4.0	2.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.43	4.69	2.40	1.01	2.55	6.87	9.43	2.02	1.57	2.11	1.03	7.24	4.14	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	156.0	156.0	101.0	114.0	121.0	119.0	158.0	154.0	273.0	172.0	93.0	115.0	144.3	
EFFLUENT (MG/L)	6.4	19.0	13.3	6.0	5.0	3.7	5.8	2.5	5.3	1.0	0.9	3.7	6.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	11.32	33.06	21.28	12.18	10.65	8.47	10.32	4.60	9.27	1.76	1.86	6.69	11.47	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.9	6.7	5.4	4.4	4.9	5.9	6.5	6.9	14.9	4.6	4.4	6.3	6.5	
EFFLUENT (MG/L)	0.3	0.5	0.2	0.2	0.2	0.3	0.5	0.4	0.3	0.1	0.1	0.2	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.53	0.87	0.32	0.40	0.42	0.68	0.89	0.73	0.52	0.17	0.20	0.36	0.56	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

INFLUENT SEWAGE - ENFORCING SEWER USE BYLAW

START DATE END DATE ANTICIPATED
 COMPLIANCE

1989/03

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BRADFORD
 PLANT : BRADFORD WPCP
 WORKS NUMBER : 110000944
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 6.81 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : SCHOMBERG RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 12,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.10	3.94	4.12	4.23	4.26	4.63	4.04	4.27	4.31	4.66	5.11	4.44	4.34	
BOD5														
INFLUENT (MG/L)	194.5	202.0	237.0	166.0	147.0	149.5	169.0	169.0	176.5	210.0	191.5	245.0	188.1	
EFFLUENT (MG/L)	5.4	4.5	5.5	4.0	3.1	1.9	2.4	1.7	1.4	1.6	3.6	7.8	3.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	22.14	17.73	22.66	16.92	13.20	8.79	9.69	7.25	6.03	7.45	18.39	34.63	15.62	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	262.5	303.0	502.5	152.0	178.0	153.5	216.0	348.4	358.3	523.4	574.9	418.9	332.6	
EFFLUENT (MG/L)	2.9	4.3	5.0	4.0	2.8	1.6	2.8	3.3	3.3	2.4	2.2	2.1	3.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	11.89	16.94	20.60	16.92	11.92	7.40	11.31	14.09	14.22	11.18	11.24	9.32	13.45	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.8	7.4	7.8	5.3	7.0	6.5	7.8	6.5	7.3	7.6	5.7	7.3	6.9	
EFFLUENT (MG/L)	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.82	0.78	0.82	0.84	0.42	0.46	0.80	0.85	0.86	0.93	1.02	0.44	0.87	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BRIGHTON
 PLANT : BRIGHTON LAGOON
 WORKS NUMBER : 11000953
 TREATMENT : AERATED CELL PLUS LAGOON
 : CONTINUOUS DISCHARGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 DESIGN CAPACITY : 3.86 (1000 M3)

REGION : CENTRAL
 DISTRICT : NORTHUMBERLAND
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : L.ONT.PRESQUILLE BAY
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,750

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.99	2.47	3.10	3.49	3.80	3.46	1.78	1.85	2.57	3.45	3.98	ND	2.99	
LAGOON DISCHARGE	92.84	69.24	96.27	100.16	117.72	103.99	55.30	57.50	78.85	106.83	19.49	ND	81.65	
BOD5														
INFLUENT (MG/L)	72.0	52.0	81.0	72.0	27.0	53.0	29.0	83.0	77.0	64.0	79.0	77.0	63.8	
EFFLUENT (MG/L)	11.0	20.8	21.9	23.0	8.0	22.6	0.5	3.7	1.6	2.5	5.6	4.9	10.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	32.89	51.37	67.89	80.27	30.40	78.19	0.89	6.84	4.11	8.62	22.28	ND	31.40	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	66.0	60.0	62.0	50.0	38.0	74.0	47.0	86.0	68.0	74.0	72.0	76.0	64.4	
EFFLUENT (MG/L)	12.0	29.0	31.0	31.5	6.0	7.5	6.5	3.0	4.0	1.6	2.2	2.0	11.4	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	35.88	71.63	96.10	109.93	22.80	25.95	11.57	5.55	10.28	5.52	8.75	ND	34.09	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.1	2.8	5.0	2.9	1.8	3.6	2.7	4.7	4.6	1.4	4.0	4.2	3.5	
EFFLUENT (MG/L)	0.7	0.9	1.3*	1.0	0.7	0.4	0.5	0.1	0.3	0.5	0.3	0.2	0.6	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.09	2.22	4.03	3.49	2.66	1.38	0.89	0.18	0.77	1.72	1.19	ND	1.79	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BROCK
 PLANT : BEAVERTON RIVER 1 LAGOON (SUNDERLAND)
 WORKS NUMBER : 120003496
 TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
 : EXFILTRATION LAGOON
 :
 DESIGN CAPACITY : 0.75 (1000 M3)

REGION : CENTRAL
 DISTRICT : DURHAM, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : NO DISC.TO SURFACE WATER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 875

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.28	0.28	0.27	0.30	0.34	0.31	0.26	0.24	0.27	0.25	0.28	0.27	0.28	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	680.0	210.0	320.0	377.0	175.0	9.0	310.0	230.0	828.0	258.0	423.0	347.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	352.0	356.0	200.0	188.0	328.0	424.0	7.0	156.0	342.0	273.0	238.0	482.0	278.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	41.0	88.0	8.5	10.5	ND	ND	ND	ND	26.4	18.5	3.9	19.1	27.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:

BOD - HAS NO CRITERIA
 SS - HAS NO CRITERIA
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BROCK
 PLANT : BEAVERTON RIVER 2 LAGOON (CANNINGTON)
 WORKS NUMBER : 110001248
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.92 (1000 M3)

REGION : CENTRAL
 DISTRICT : DURHAM, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : BEAVERTON RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,835

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.67	0.67	0.75	0.98	1.11	0.81	0.61	0.53	0.54	0.59	0.81	0.63	0.73	
LAGOON DISCHARGE	ND	ND	ND	ND	172.75	ND	ND	ND	ND	41.82	67.28	ND	93.95	
BOD5														
INFLUENT (MG/L)	27.0	98.0	190.0	146.0	66.0	119.0	172.0	290.0	112.0	81.0	159.0	167.0	135.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	5.6	ND	ND	ND	ND	11.9	9.9	ND	9.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	6.21	ND	ND	ND	ND	7.02	8.01	ND	6.64	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	217.0	442.0	206.0	254.0	162.0	168.0	200.0	262.0	212.0	234.0	152.0	295.0	233.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	4.8	ND	ND	ND	ND	6.5	4.4	ND	5.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	5.32	ND	ND	ND	ND	3.83	3.56	ND	3.80	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	11.5	13.0	10.1	4.6	ND	ND	ND	9.6	7.2	4.9	3.8	6.5	7.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.1	ND	ND	ND	ND	0.2	0.2	ND	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.11	ND	ND	ND	ND	0.11	0.16	ND	0.15	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BROCK
 PLANT : LAKE SIMCOE LAGOON (BEAVERTON)
 WORKS NUMBER : 110000908
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 1.73 (1000 M3)

REGION : CENTRAL
 DISTRICT : DURHAM, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE SIMCOE
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,570

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.54	1.35	1.99	2.45	2.69	2.59	1.60	1.58	1.50	1.61	2.41	1.66	1.91	
LAGOON DISCHARGE	ND	ND	ND	118.20	236.39	ND	ND	ND	ND	154.56	77.28	ND	146.61	
BOD5														
INFLUENT (MG/L)	237.0	123.0	387.0	103.0	111.0	156.0	176.0	344.0	169.0	520.0	89.0	158.0	214.4	
EFFLUENT (MG/L)	ND	ND	ND	8.5	3.6	ND	ND	ND	ND	8.8	13.5	ND	8.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	20.82	9.68	ND	ND	ND	ND	14.16	32.53	ND	16.43	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	216.0	180.0	80.0	108.0	184.0	196.0	373.0	545.0	842.0	678.0	80.0	136.0	301.5	
EFFLUENT (MG/L)	ND	ND	ND	8.8	3.5	ND	ND	ND	ND	4.5	5.2	ND	5.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	21.56	9.41	ND	ND	ND	ND	7.24	12.53	ND	10.51	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	11.2	9.7	9.5	4.8	ND	ND	ND	10.3	12.1	12.1	3.9	4.2	8.6	
EFFLUENT (MG/L)	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	0.1	0.1	ND	0.1	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.24	0.26	ND	ND	ND	ND	0.16	0.24	ND	0.19	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BURLINGTON
 PLANT : SKYWAY WPCP
 WORKS NUMBER : 110000070
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 93.19 (1000 M3)

REGION : CENTRAL
 DISTRICT : HALTON, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : HAMILTON HARBOUR
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 120,100

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	63.03	60.40	65.90	76.26	71.54	66.54	66.65	67.42	66.89	64.59	72.69	62.14	67.00	
<u>BOD5</u>														
INFLUENT (MG/L)	223.0	255.0	215.0	173.0	203.0	203.0	170.0	250.0	287.0	217.0	147.0	205.0	212.3	
EFFLUENT (MG/L)	9.6	10.0	16.0	16.0	13.0	15.0	9.9	7.0	8.7	11.1	7.7	5.4	10.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	605.08	604.00	1054.40	1220.16	930.02	998.10	659.83	471.94	581.94	716.94	559.71	335.55	723.60	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	249.0	271.0	171.0	272.0	234.0	190.0	235.0	460.0	347.0	231.0	127.0	272.0	254.9	
EFFLUENT (MG/L)	5.7	8.3	22.6	9.0	12.0	14.7	11.0	6.5	6.3	6.8	8.2	5.4	9.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	359.27	501.32	1489.34	686.34	858.48	978.13	733.15	438.23	421.40	439.21	596.05	335.55	649.90	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	6.4	8.0	7.3	7.2	7.8	6.1	6.7	9.0	10.2	7.1	6.3	7.1	7.4	
EFFLUENT (MG/L)	0.7	0.8	1.0	0.5	0.7	0.7	0.8	0.8	0.7	0.7	1.0	0.6	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	44.12	48.32	65.90	38.13	50.07	46.57	53.32	53.93	46.82	45.21	72.69	37.28	53.60	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CAMPBELLFORD
 PLANT : CAMPBELLFORD WPCP
 WORKS NUMBER : 110000962
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 5.91 (1000 M3)

REGION : CENTRAL
 DISTRICT : NORTHUMBERLAND
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : TRENT RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,255

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.29	4.78	5.68	7.35	7.13	7.24	6.16	5.78	5.77	4.90	6.11	5.74	5.99	
BOD5														
INFLUENT (MG/L)	30.0	75.0	122.5	55.5	27.0	21.0	17.0	32.0	33.5	100.5	30.5	59.0	50.3	
EFFLUENT (MG/L)	5.4	3.0	3.5	1.6	3.2	2.0	4.0	2.1	1.4	5.5	4.6	15.1	4.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	28.56	14.34	19.88	11.76	22.81	14.48	24.64	12.13	8.07	26.95	28.10	86.67	25.76	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	48.0	102.0	217.0	75.0	88.0	26.5	30.0	51.0	35.5	120.5	35.5	54.0	73.6	
EFFLUENT (MG/L)	9.7	8.8	9.5	4.8	6.0	9.0	6.3	5.8	7.8	7.9	8.4	7.8	7.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	51.31	42.06	53.96	35.28	42.78	65.16	38.80	33.52	45.00	38.71	51.32	44.77	46.12	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.4	3.4	5.1	2.0	1.8	1.6	1.2	2.0	2.1	3.2	1.5	2.6	2.7	
EFFLUENT (MG/L)	0.6	0.6	0.5	0.8	0.4	0.4	0.6	0.5	0.5	0.6	0.5	0.6	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	3.17	2.86	2.84	5.88	2.85	2.89	3.69	2.89	2.88	2.94	3.05	3.44	3.59	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COBOURG
 PLANT : COBOURG WPCP NO 1
 WORKS NUMBER : 120000097
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 16.04 (1000 M3)

REGION : CENTRAL
 DISTRICT : NORTHUMBERLAND
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : COBOURG BROOK
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 5,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	7.00	6.77	6.91	7.91	7.86	8.14	6.09	5.46	6.27	6.59	9.46	5.77	7.02	
BOD5														
INFLUENT (MG/L)	547.0	591.0	547.0	558.0	493.0	473.0	447.0	548.0	604.0	510.0	485.0	534.0	528.1	
EFFLUENT (MG/L)	11.3	33.3	41.7	29.1	12.8	10.5	8.4	8.7	13.1	4.4	13.6	45.4	19.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	79.10	225.44	288.14	230.18	100.60	85.47	51.15	47.50	82.13	28.99	128.65	261.95	136.19	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	256.0	354.0	241.0	230.0	229.0	209.0	245.0	244.0	337.0	322.0	249.0	239.0	262.9	
EFFLUENT (MG/L)	13.1	26.1	38.0	20.5	12.6	11.7	10.3	9.3	11.8	6.6	13.0	13.9	15.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	91.70	176.69	262.58	162.15	99.03	95.23	62.72	50.77	73.98	43.49	122.98	80.20	109.51	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.2	2.9	4.5	3.3	3.0	3.1	4.4	4.4	6.5	3.4	4.8	5.3	4.2	
EFFLUENT (MG/L)	0.6	1.1*	1.7*	0.5	0.9	1.1*	1.4*	1.1*	1.4*	0.6	0.7	1.6*	1.1	7
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	4.20	7.44	11.74	3.95	7.07	8.95	8.52	6.00	8.77	3.95	6.62	9.23	7.72	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED
 EQUIPMENT/MAINTENANCE - NEW EQUIPMENT BEING INSTALLED

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989/12
 1989/12

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COBOURG
 PLANT : COBOURG WPCP NO 2
 WORKS NUMBER : 120003192
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 11.70 (1000 M3)

REGION : CENTRAL
 DISTRICT : NORTHUMBERLAND
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 5,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.89	2.86	2.91	3.70	3.91	4.55	3.46	3.17	3.46	4.30	6.49	5.03	3.89	
BOD5														
INFLUENT (MG/L)	157.0	184.0	173.0	124.0	156.0	176.0	135.0	149.0	131.0	121.0	107.0	100.0	142.8	
EFFLUENT (MG/L)	19.0	24.4	13.0	9.0	7.8	8.4	6.1	6.1	6.0	8.7	18.2	13.3	11.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	54.91	69.78	37.83	33.30	30.49	38.22	21.10	19.33	20.76	37.41	118.11	66.89	45.51	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	195.0	260.0	242.0	212.0	254.0	433.0	232.0	259.0	221.0	214.0	290.0	225.0	253.1	
EFFLUENT (MG/L)	16.5	11.1	9.4	9.1	9.2	10.2	10.2	11.1	6.9	13.5	13.1	7.0	10.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	47.68	31.74	27.35	33.67	35.97	46.41	35.29	35.18	23.87	58.05	85.01	35.21	41.23	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.7	3.0	4.3	3.8	3.1	5.9	4.9	3.3	5.6	3.5	3.3	3.2	4.0	
EFFLUENT (MG/L)	0.6	0.7	0.4	0.7	0.5	0.7	0.6	0.9	0.7	0.6	0.5	0.5	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.73	2.00	1.16	2.59	1.95	3.18	2.07	2.85	2.42	2.58	3.24	2.51	2.33	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COLBORNE
 PLANT : COLBORNE WPCP
 WORKS NUMBER : 120000088
 TREATMENT : SUTTON PROCESS
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.37 (1000 M3)

REGION : CENTRAL
 DISTRICT : NORTHUMBERLAND
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : COLBORNE CREEK
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.94	1.63	1.38	0.67	1.27	1.30	1.54	1.21	ND	1.11	1.61	0.34	1.18	
BOD5														
INFLUENT (MG/L)	75.0	138.0	116.0	43.0	46.0	54.0	78.0	122.0	106.0	144.0	39.0	ND	87.4	
EFFLUENT (MG/L)	4.3	4.0	8.8	3.4	0.8	3.6	ND	0.7	0.8	2.3	ND	ND	3.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	4.04	6.52	12.14	2.27	1.01	4.68	ND	0.84	ND	2.55	ND	ND	3.78	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	111.0	168.0	178.0	45.0	56.0	77.0	120.0	165.0	174.0	532.0	78.0	ND	154.9	
EFFLUENT (MG/L)	5.4	5.6	6.5	6.5	0.5	6.0	ND	2.5	4.5	0.8	ND	ND	4.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	5.07	9.12	8.97	4.35	0.63	7.80	ND	3.02	ND	0.88	ND	ND	5.07	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.9	ND	4.7	3.3	2.3	2.9	5.4	5.8	5.8	6.4	2.5	ND	4.5	
EFFLUENT (MG/L)	0.3	ND	0.2	0.3	0.2	0.6	ND	1.1	0.6	0.5	ND	ND	0.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.28	ND	0.27	0.20	0.25	0.78	ND	1.33	ND	0.55	ND	ND	0.59	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	INSUFFICIENT DATA

NOTE:

BOD - HAS NO CRITERIA
 SS - HAS NO CRITERIA
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COLDWATER
 PLANT : COLDWATER WPCP
 WORKS NUMBER : 110001596
 TREATMENT : EXTENDED AERATION
 :
 :
 DESIGN CAPACITY : 0.54 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : COLDWATER RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,015

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.44	0.35	0.57	0.62	0.64	0.56	0.39	0.36	0.32	0.33	0.43	0.50	0.46	
<u>BOD5</u>														
INFLUENT (MG/L)	101.0	70.5	68.0	85.0	73.1	84.6	54.1	122.0	107.0	89.9	51.4	207.0	92.8	
EFFLUENT (MG/L)	3.5	4.5	7.0	5.9	4.0	5.4	7.5	3.9	4.8	2.9	5.9	1.3	4.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.54	1.57	3.99	3.65	2.56	3.02	2.92	1.40	1.53	0.95	2.53	0.65	2.16	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	69.0	78.0	78.0	79.0	117.5	85.9	70.5	104.0	131.0	90.5	52.5	249.5	100.5	
EFFLUENT (MG/L)	3.5	5.3	6.0	5.6	5.8	7.5	8.5	4.3	6.3	2.4	8.3	7.9	6.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.54	1.85	3.42	3.47	3.71	4.20	3.31	1.54	2.01	0.79	3.56	3.95	2.76	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	5.5	3.3	5.1	3.8	4.8	5.4	5.4	5.6	5.3	3.6	2.8	8.7	4.9	
EFFLUENT (MG/L)	2.6	2.6	3.0	2.6	3.5	4.0	5.2	4.6	4.5	4.3	2.3	3.1	3.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	1.14	0.91	1.71	1.61	2.24	2.24	2.02	1.65	1.44	1.41	0.98	1.55	1.61	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COLLINGWOOD
 PLANT : COLLINGWOOD WPCP
 WORKS NUMBER : 120000550
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 24.54 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : GEORGIAN BAY
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 12,135

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	19.11	17.45	20.15	21.56	20.81	14.34	10.58	11.53	11.71	12.51	13.95	12.91	15.55	
BOD5														
INFLUENT (MG/L)	181.0	200.0	175.0	205.0	197.0	187.0	278.0	344.0	271.0	182.0	208.0	209.0	219.8	
EFFLUENT (MG/L)	6.2	8.8	6.3	6.4	6.6	7.9	9.0	10.9	9.1	9.3	8.1	11.0	8.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	118.48	153.56	126.94	137.98	137.34	113.28	95.22	125.67	106.56	116.34	112.99	142.01	129.07	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	130.0	162.0	216.0	145.0	176.0	195.0	266.0	179.0	161.0	145.0	163.0	147.0	173.8	
EFFLUENT (MG/L)	9.2	10.1	10.6	9.6	10.9	13.4	14.2	13.2	9.4	9.6	12.3	15.0	11.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	175.81	176.24	213.59	206.97	226.82	192.15	150.23	152.19	110.07	120.09	171.58	193.65	178.83	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.3	7.1	7.6	7.0	6.0	8.0	6.8	7.3	4.7	5.7	4.8	4.4	6.2	
EFFLUENT (MG/L)	0.5	0.8	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	9.55	13.96	12.09	10.78	10.40	7.17	5.29	5.76	5.85	6.25	6.97	5.16	7.78	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COOKSTOWN
 PLANT : COOKSTOWN WPCP
 WORKS NUMBER : 110002265
 TREATMENT : SUTTON PROCESS
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : SEASONAL DISCHARGE
 DESIGN CAPACITY : 0.82 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : INNISFIL CREEK
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,027

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.20	0.18	0.23	0.22	0.21	0.22	0.20	0.22	0.27	0.30	0.36	0.37	0.25	
BOD5														
INFLUENT (MG/L)	121.5	137.0	114.5	196.0	83.5	182.5	106.0	114.5	182.0	223.0	155.5	163.0	148.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	0.4	ND	2.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.86	ND	ND	ND	ND	ND	0.14	ND	0.58	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	155.5	168.0	199.0	580.0	158.5	352.0	170.0	131.0	201.5	191.0	178.5	240.0	227.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	9.0	ND	ND	ND	ND	ND	1.1	ND	5.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	1.89	ND	ND	ND	ND	ND	0.39	ND	1.28	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.4	9.1	5.9	8.6	5.4	8.4	6.5	6.0	10.2	8.5	8.3	8.0	7.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	0.4	ND	0.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.02	ND	ND	ND	ND	ND	0.14	ND	0.08	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - HAS NO CRITERIA
 SS - HAS NO CRITERIA
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DYSART-ET-AL
 PLANT : HALIBURTON WPCP
 WORKS NUMBER : 110001603
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 0.45 (1000 M3)

REGION : CENTRAL
 DISTRICT : HALIBURTON
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : DRAG R. TO GRASS LAKE
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 920

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.28	0.26	0.33	0.37	0.37	0.32	0.27	0.21	0.23	0.24	0.34	0.29	0.29	
BOD5														
INFLUENT (MG/L)	147.0	190.0	42.0	135.0	29.0	132.0	163.0	134.0	50.0	50.0	70.0	26.0	97.3	
EFFLUENT (MG/L)	3.9	0.5	0.5	0.5	14.8	10.0	3.4	3.8	0.5	1.8	5.0	0.6	3.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.09	0.13	0.16	0.18	5.47	3.20	0.91	0.79	0.11	0.43	1.70	0.17	1.10	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	230.0	250.0	51.0	124.0	40.0	49.0	195.0	143.0	64.0	39.0	83.0	28.0	108.0	
EFFLUENT (MG/L)	4.0	8.0	5.0	10.5	13.0	8.8	6.5	2.5	5.0	4.9	5.1	6.6	6.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.12	2.08	1.65	3.88	4.81	2.81	1.75	0.52	1.15	1.17	1.73	1.91	1.94	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	14.6	7.8	1.2	4.8	ND	4.8	8.3	6.3	3.0	3.9	2.6	1.4	5.3	
EFFLUENT (MG/L)	0.5	0.6	0.3	0.5	ND	0.5	0.6	0.7	0.4	0.5	0.6	0.5	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.14	0.15	0.09	0.18	ND	0.16	0.16	0.14	0.09	0.12	0.20	0.14	0.15	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENVIRONMENTAL ASSESSMENT BEING CONDUCTED

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : EAST GWILLIMBURY
 PLANT : HOLLAND LANDING LAGOON
 WORKS NUMBER : 120001620
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.36 (1000 M3)

REGION : CENTRAL
 DISTRICT : YORK, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : HOLLAND RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,200

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.27	1.06	1.03	1.21	1.26	0.89	0.89	0.89	1.04	1.30	1.42	1.14	1.12	
LAGOON DISCHARGE	ND	ND	ND	ND	191.00	ND	ND	ND	ND	ND	91.68	ND	141.34	
BOD5														
INFLUENT (MG/L)	139.0	ND	202.0	132.0	104.0	84.0	ND	144.0	76.0	182.0	115.0	102.0	128.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	12.9	ND	ND	ND	ND	ND	12.8	ND	12.9	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	16.25	ND	ND	ND	ND	ND	18.17	ND	14.45	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	252.0	ND	276.0	91.0	117.0	83.0	ND	120.0	83.0	188.0	124.0	116.0	145.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	19.1	ND	ND	ND	ND	ND	26.8	ND	23.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	24.06	ND	ND	ND	ND	ND	38.05	ND	25.76	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	9.0	ND	5.2	ND	7.0	5.3	ND	7.1	7.9	11.1	7.9	5.8	7.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.7	ND	ND	ND	ND	ND	0.4	ND	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.88	ND	ND	ND	ND	ND	0.56	ND	0.67	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : EAST GWILLIMBURY
 PLANT : MOUNT ALBERT WPCP
 WORKS NUMBER : 120001853
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : SEASONAL DISCHARGE
 DESIGN CAPACITY : 0.68 (1000 M3)

REGION : CENTRAL
 DISTRICT : YORK, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : MOUNT ALBERT CREEK
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,100

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.31	0.31	0.30	0.35	0.37	0.39	0.34	0.34	0.36	0.34	0.39	0.36	0.35	
BOD5														
INFLUENT (MG/L)	125.0	15.0	120.0	135.0	160.0	118.0	ND	98.0	19.0	164.0	78.0	61.0	99.4	
EFFLUENT (MG/L)	33.0	ND	ND	ND	ND	ND	ND	ND	ND	10.6	15.1	ND	19.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.23	ND	ND	ND	ND	ND	ND	ND	ND	3.60	5.88	ND	6.86	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	93.0	73.0	173.0	166.0	105.0	75.0	ND	150.0	46.0	71.0	153.0	94.0	109.0	
EFFLUENT (MG/L)	19.8	ND	ND	ND	ND	ND	ND	ND	ND	28.8	29.3	ND	26.0*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.13	ND	ND	ND	ND	ND	ND	ND	ND	9.79	11.42	ND	9.10	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.5	15.0	9.3	ND	6.6	6.6	ND	5.9	3.3	8.7	5.0	4.1	7.2	
EFFLUENT (MG/L)	0.4	ND	ND	ND	ND	ND	ND	ND	ND	0.3	0.3	ND	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.12	ND	ND	ND	ND	ND	ND	ND	ND	0.10	0.11	ND	0.11	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ELMVALE
 PLANT : ELMVALE LAGOON
 WORKS NUMBER : 110000169
 TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
 :
 :
 DESIGN CAPACITY : 0.75 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : WYE RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,565

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	1.21	1.42	1.63	1.59	1.25	0.95	0.98	1.11	1.39	1.59	1.26	1.31	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	126.0	152.0	86.0	154.0	142.0	208.0	212.0	258.0	183.0	149.0	364.0	184.9	
EFFLUENT (MG/L)	ND	13.6	35.6	24.4	11.7	16.0	17.1	21.2	16.0	20.5	21.1	ND	19.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	16.45	50.55	39.77	18.60	20.00	16.24	20.77	17.76	28.49	33.54	ND	25.81	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	184.0	262.0	109.0	464.0	111.0	318.0	140.0	291.0	288.0	191.0	1,120.0	316.2	
EFFLUENT (MG/L)	ND	25.0	21.5	24.0	73.0	12.0	9.0	28.0	30.5	35.0	3.3	ND	26.1	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	30.25	30.53	39.12	116.07	15.00	8.55	27.44	33.85	48.65	5.24	ND	34.19	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	7.4	5.9	10.4	8.9	6.6	8.9	8.7	8.2	7.6	7.5	8.0	
EFFLUENT (MG/L)	ND	ND	4.5	3.0	2.8	3.5	3.8	3.9	4.0	2.6	3.4	ND	3.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	6.39	4.89	4.45	4.37	3.61	3.82	4.44	3.61	5.40	ND	4.59	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ESSA
 PLANT : ANGUS WPCP
 WORKS NUMBER : 110003282
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 3.39 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : NOTTAWASAGA RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,560

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.13	0.94	1.02	1.14	1.16	1.18	0.90	0.83	0.87	0.92	1.12	1.09	1.03	
BOD5														
INFLUENT (MG/L)	130.5	179.0	170.5	51.0	157.5	123.0	151.5	148.0	129.5	223.5	199.0	196.0	154.9	
EFFLUENT (MG/L)	4.1	3.1	6.5	1.6	2.6	2.5	3.0	3.2	3.6	6.3	3.0	1.8	3.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.63	2.91	6.63	1.82	3.01	2.95	2.70	2.65	3.13	5.79	3.36	1.96	3.50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	127.0	192.0	222.0	102.5	245.0	124.5	149.0	145.5	289.5	256.0	168.0	261.0	190.2	
EFFLUENT (MG/L)	5.4	6.5	9.5	8.0	13.3	10.3	6.6	5.8	8.8	6.7	3.9	4.6	7.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.10	6.11	9.69	9.12	15.42	12.15	5.94	4.81	7.65	6.16	4.36	5.01	7.73	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.1	7.8	7.5	3.7	6.7	4.3	6.7	7.7	8.3	8.5	7.3	8.2	7.0	
EFFLUENT (MG/L)	0.1	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.4	0.2	0.3	0.2	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.11	0.18	0.20	0.22	0.34	0.23	0.27	0.24	0.34	0.18	0.33	0.21	0.21	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : FENELON FALLS
 PLANT : FENELON FALLS WPCP(SUMMER POPSERVE 3136)
 WORKS NUMBER : 110001612
 TREATMENT : OXIDATION DITCH
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.00 (1000 M3)

REGION : CENTRAL
 DISTRICT : VICTORIA
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : FENELON RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,817

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.88	0.83	1.06	1.27	1.23	0.96	0.91	0.89	0.88	1.19	1.36	1.05	1.04	
BOD5														
INFLUENT (MG/L)	114.0	106.0	126.0	65.5	82.0	127.0	170.0	174.0	124.0	105.0	68.0	92.0	112.8	
EFFLUENT (MG/L)	3.8	17.5	6.0	9.6	37.3	6.0	5.1	0.9	3.2	0.7	11.8	16.4	9.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.34	14.52	6.36	12.19	45.87	5.76	4.64	0.80	2.81	0.83	16.04	17.22	10.30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	100.0	150.0	132.0	83.5	78.0	121.0	172.0	162.0	129.0	83.0	72.0	88.0	114.2	
EFFLUENT (MG/L)	9.4	23.5	15.0	19.3	32.0	13.6	12.0	5.0	8.0	5.0	9.0	10.4	13.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8.27	19.50	15.90	24.51	39.36	13.05	10.92	4.45	7.04	5.95	12.24	10.92	14.04	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.9	5.6	6.3	4.5	6.0	3.8	7.7	8.1	6.3	5.4	4.2	4.9	5.6	
EFFLUENT (MG/L)	0.2	0.7	0.4	1.0	0.8	0.3	0.3	0.3	0.5	0.3	0.4	0.3	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.17	0.58	0.42	1.27	0.98	0.28	0.27	0.26	0.44	0.35	0.54	0.31	0.52	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

START DATE END DATE ANTICIPATED
 COMPLIANCE

NO ACTION - MARGINAL FAILURE-MONITORING LEVEL OF FAILED PARAMETER CLOSELY
 NO REMEDIAL MEASURES DESCRIPTION

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : GEORGINA
 PLANT : KESWICK WPCP
 WORKS NUMBER : 120001755
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 12.07 (1000 M3)

REGION : CENTRAL
 DISTRICT : YORK, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : COOK BAY(L.SIMCOE)
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 8,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.37	3.58	3.65	4.44	4.85	4.56	3.78	3.96	3.83	4.20	4.92	4.41	4.13	
BOD5														
INFLUENT (MG/L)	104.0	116.0	99.0	89.0	92.0	72.0	105.0	114.0	132.0	174.0	113.0	109.0	109.9	
EFFLUENT (MG/L)	2.3	0.5	0.9	0.7	0.5	0.5	0.4	0.3	0.6	0.3	0.3	0.3	0.6	
CONCENTRATION LIMIT (MG/L)													10.0	
LOADING (KG/D)	7.75	1.79	3.28	3.10	2.42	2.28	1.51	1.18	2.29	1.26	1.47	1.32	2.48	
LOADING LIMIT (KG/D)														
SUSPENDED SOLIDS														
INFLUENT (MG/L)	133.0	ND	180.0	116.0	190.0	149.0	146.0	137.0	146.0	143.0	191.0	108.0	149.0	
EFFLUENT (MG/L)	2.2	3.0	3.3	4.0	5.3	1.6	2.5	4.2	2.0	0.5	0.5	0.6	2.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	7.41	10.74	12.04	17.76	25.70	7.29	9.45	16.63	7.66	2.10	2.46	2.64	10.33	
LOADING LIMIT (KG/D)														
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.2	7.1	5.8	4.8	4.6	4.5	5.7	6.4	6.2	6.4	5.2	5.9	5.7	
EFFLUENT (MG/L)	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	
CONCENTRATION LIMIT (MG/L)													0.3	
LOADING (KG/D)	0.33	0.35	0.73	0.88	0.97	0.91	0.75	0.79	1.14	1.26	0.98	0.88	0.83	
LOADING LIMIT (KG/D)													3.62	

SUMMARY

PARAM	CRITERIA	LOADING	COMPLIES WITH CONC	LOADING
BOD	10.0 MG/L	NA	YES	NA
SS	NA	NA	NA	NA
TP	0.3 MG/L	3.62 KG/D	YES	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - HAS NO CRITERIA
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GEORGINA
 PLANT : KESWICK WPCP
 WORKS NUMBER : 120001755
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 12.07 (1000 M3)

REGION : CENTRAL
 DISTRICT : YORK, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : COOK BAY(L.SIMCOE)
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 8,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.37	3.58	3.65	4.44	4.85	4.56	3.78	3.96	3.83	4.20	4.92	4.41	4.13	
BOD5														
INFLUENT (MG/L)	104.0	116.0	99.0	89.0	92.0	72.0	105.0	114.0	132.0	174.0	113.0	109.0	109.9	
EFFLUENT (MG/L)	2.3	0.5	0.9	0.7	0.5	0.5	0.4	0.3	0.6	0.3	0.3	0.3	0.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.75	1.79	3.28	3.10	2.42	2.28	1.51	1.18	2.29	1.26	1.47	1.32	2.48	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	133.0	ND	180.0	116.0	190.0	149.0	146.0	137.0	146.0	143.0	191.0	108.0	149.0	
EFFLUENT (MG/L)	2.2	3.0	3.3	4.0	5.3	1.6	2.5	4.2	2.0	0.5	0.5	0.6	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.41	10.74	12.04	17.76	25.70	7.29	9.45	16.63	7.66	2.10	2.46	2.64	10.33	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.2	7.1	5.8	4.8	4.6	4.5	5.7	6.4	6.2	6.4	5.2	5.9	5.7	
EFFLUENT (MG/L)	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.33	0.35	0.73	0.88	0.97	0.91	0.75	0.79	1.14	1.26	0.98	0.88	0.83	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GEORGINA
 PLANT : SUTTON WPCP
 WORKS NUMBER : 110001168
 TREATMENT : SUTTON PROCESS
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : SEASONAL DISCHARGE
 DESIGN CAPACITY : 2.04 (1000 M3)

REGION : CENTRAL
 DISTRICT : YORK, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : BLACK RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,650

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.13	1.13	1.31	1.50	1.82	2.04	1.83	1.79	1.48	1.36	0.94	0.94	1.44	
BOD5														
INFLUENT (MG/L)	183.0	ND	185.0	112.0	ND	80.0	ND	153.0	66.0	68.0	387.0	115.0	149.9	
EFFLUENT (MG/L)	4.5	2.9	2.5	1.7	ND	8.7	ND	19.1	6.4	ND	0.8	1.7	5.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	5.08	3.27	3.27	2.55	ND	17.74	ND	34.18	9.47	ND	0.75	1.59	7.78	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	120.0	ND	186.0	120.0	ND	101.0	ND	179.0	98.0	166.0	139.0	125.0	137.1	
EFFLUENT (MG/L)	1.4	5.0	2.5	4.0	ND	12.4	ND	29.0	2.5	ND	9.3	2.4	7.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	1.58	5.65	3.27	6.00	ND	25.29	ND	51.91	3.70	ND	8.74	2.25	10.94	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.5	ND	7.2	ND	ND	5.5	ND	9.5	6.7	7.1	6.5	6.8	7.0	
EFFLUENT (MG/L)		0.1	0.1	ND	ND	0.5	ND	1.3	2.2	ND	0.3	0.1	0.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)		0.11	0.13	ND	ND	1.02	ND	2.32	3.25	ND	0.28	0.09	0.86	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - HAS NO CRITERIA
 SS - HAS NO CRITERIA
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GRAVENHURST
 PLANT : GRAVENHURST WPCP (DUAL OPERATION)
 WORKS NUMBER : 120000809
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 DESIGN CAPACITY : 3.04 (1000 M3)

REGION : CENTRAL
 DISTRICT : MUSKOKA, DIST. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : MUSKOKA LAKE
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,782

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.25	2.10	2.48	2.89	2.63	2.46	2.13	2.02	1.90	1.96	2.29	2.23	2.28	
BOD5														
INFLUENT (MG/L)	58.0	118.0	40.0	106.0	86.0	160.0	129.0	ND	157.0	154.0	170.0	172.0	122.7	
EFFLUENT (MG/L)	4.0	6.6	3.1	2.4	2.7	0.5	8.4	ND	7.3	3.6	5.6	3.3	4.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.00	13.86	7.68	6.93	7.10	1.23	17.89	ND	13.87	7.05	12.82	7.35	9.80	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	89.0	122.0	60.0	112.0	107.0	191.0	136.0	79.0	124.0	167.0	151.0	159.0	124.8	
EFFLUENT (MG/L)	16.0	44.0	13.0	6.5	1.5	4.5	3.0	4.0	2.5	2.4	9.5	4.4	9.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	36.00	92.40	32.24	18.78	3.94	11.07	6.39	8.08	4.75	4.70	21.75	9.81	21.20	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.2	4.6	3.4	5.1	4.6	7.1	6.6	4.4	7.3	6.2	5.6	6.9	5.6	
EFFLUENT (MG/L)	0.4	0.3	0.6	0.2	ND	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.90	0.63	1.48	0.57	ND	0.24	0.42	0.40	0.38	0.19	0.45	0.44	0.46	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW
 FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE
 FACILITY EXPANSION/UPGRADING - APPLICATION FOR FUNDING

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1987	1992	1992
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HALTON HILLS
 PLANT : ACTON WPCP + LAGOON
 WORKS NUMBER : 120001023
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 4.54 (1000 M3)

REGION : CENTRAL
 DISTRICT : HALTON, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : BLACK CREEK
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 7,478

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.70	2.50	2.60	2.90	2.80	3.20	2.50	2.30	2.40	2.50	2.20	2.20	2.57	
BOD5														
INFLUENT (MG/L)	193.0	120.0	223.0	153.0	115.0	107.0	98.0	127.0	ND	160.0	140.0	135.0	142.8	
EFFLUENT (MG/L)	1.3	1.0	1.1	1.1	2.1	0.3	0.5	0.3	0.3	0.9	1.2	1.0	0.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.51	2.50	2.86	3.19	5.88	0.96	1.25	0.69	0.72	2.25	2.64	2.20	2.31	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	245.0	159.0	130.0	188.0	180.0	115.0	139.0	141.0	ND	189.0	166.0	148.0	163.6	
EFFLUENT (MG/L)	4.5	4.8	3.9	3.6	4.6	1.9	2.5	1.0	1.7	2.1	4.7	5.8	3.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	12.15	12.00	10.14	10.44	12.88	6.08	6.25	2.30	4.08	5.25	10.34	12.76	8.74	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	6.2	7.3	6.9	5.9	5.6	5.6	7.3	ND	7.2	8.0	8.5	6.8	
EFFLUENT (MG/L)	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.7	0.5	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.81	0.75	0.78	0.58	0.84	0.64	0.50	0.46	0.48	0.50	1.54	1.10	0.77	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HALTON HILLS
 PLANT : GEORGETOWN WPCP
 WORKS NUMBER : 110000294
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 13.63 (1000 M3)

REGION : CENTRAL
 DISTRICT : HALTON, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : SILVER CREEK
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 20,100

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	9.25	8.49	9.63	9.75	8.97	9.70	8.60	8.70	8.80	8.90	10.28	9.29	9.20	
BOD5														
INFLUENT (MG/L)	190.0	232.0	240.0	147.0	130.0	160.0	143.0	ND	121.0	147.0	145.0	175.0	166.4	
EFFLUENT (MG/L)	0.4	3.2	3.4	0.8	0.4	1.6	0.8	3.2	1.4	1.2	1.8	1.4	1.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.70	27.16	32.74	7.80	3.58	15.52	6.88	27.84	12.32	10.68	18.50	13.00	14.72	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	279.0	297.0	180.0	256.0	201.0	285.0	282.0	ND	122.0	227.0	317.0	203.0	240.8	
EFFLUENT (MG/L)	2.3	2.8	3.2	5.5	5.4	3.7	5.2	5.5	4.9	7.7	6.8	10.2	5.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	21.27	23.77	30.81	53.62	48.43	35.89	44.72	47.85	43.12	68.53	69.90	94.75	48.76	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	9.4	11.6	9.4	10.9	8.4	7.7	11.2	ND	12.3	9.3	11.6	13.6	10.5	
EFFLUENT (MG/L)	0.4	0.2	0.4	0.3	0.2	0.1	0.4	1.7*	0.4	0.4	0.2	ND	0.4	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	3.70	1.69	3.85	2.92	1.79	0.97	3.44	14.79	3.52	3.56	2.05	ND	3.68	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY

SS - ASSESSED ANNUALLY

TP - ASSESSED MONTHLY

* - EXCEEDS EFFLUENT CRITERIA

SPACE (EG. " ") INDICATES A VALUE OF ZERO

ND - NO DATA

NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HASTINGS
 PLANT : HASTINGS WPCP
 WORKS NUMBER : 110001827
 TREATMENT : OXIDATION DITCH
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.05 (1000 M3)

REGION : CENTRAL
 DISTRICT : NORTHUMBERLAND
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : TRENT RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 959

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.30	0.62	0.65	1.11	1.12	0.99	0.80	0.59	0.77	0.94	0.84	0.65	0.87	
BOD5														
INFLUENT (MG/L)	236.5	62.0	46.0	67.0	30.0	62.0	90.5	80.0	56.0	66.5	45.0	94.5	78.0	
EFFLUENT (MG/L)	9.6	7.5	11.0	6.5	2.5	0.5	0.8	0.8	0.2	3.7	3.1	8.3	4.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	12.48	4.65	7.15	7.21	2.80	0.49	0.64	0.47	0.15	3.47	2.60	5.39	3.92	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	349.5	97.0	75.0	90.0	75.5	79.0	172.5	116.5	61.0	82.5	442.0	74.0	142.9	
EFFLUENT (MG/L)	11.8	13.6	16.5	20.0	10.0	8.7	5.8	6.8	9.0	12.5	6.3	8.0	10.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	15.34	8.43	10.72	22.20	11.20	8.61	4.64	4.01	6.93	11.75	5.29	5.20	9.40	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.4	3.8	2.4	4.1	2.0	2.2	3.7	3.7	2.1	2.5	2.0	3.5	3.2	
EFFLUENT (MG/L)	0.4	0.3	0.4	0.6	0.3	0.2	0.2	0.3	0.3	0.5	0.3	0.6	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.52	0.18	0.26	0.66	0.33	0.19	0.16	0.17	0.23	0.47	0.25	0.39	0.35	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HAVELOCK
 PLANT : HAVELOCK LAGOON
 WORKS NUMBER : 110001765
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.58 (1000 M3)

REGION : CENTRAL
 DISTRICT : PETERBOROUGH
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : PLATO CREEK
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,362

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.74	0.79	0.76	0.92	0.89	0.93	0.75	0.69	0.74	0.78	0.96	0.86	0.82	
LAGOON DISCHARGE	ND	ND	ND	ND	139.20	ND	ND	ND	ND	ND	ND	ND	139.20	
BOD5														
INFLUENT (MG/L)	86.3	152.0	83.5	122.0	76.0	26.0	99.5	130.5	141.5	110.0	66.5	90.0	98.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	12.8	ND	ND	ND	5.0	4.7	3.5	ND	6.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	11.39	ND	ND	ND	3.70	3.66	3.36	ND	5.33	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	102.7	147.0	141.0	177.0	69.0	55.5	108.5	142.5	107.5	167.0	60.5	112.5	115.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	15.4	ND	ND	ND	6.0	2.2	2.4	ND	6.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	13.70	ND	ND	ND	4.44	1.71	2.30	ND	5.33	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.7	7.0	5.6	5.7	3.5	2.2	6.1	6.5	5.6	6.2	3.1	5.7	5.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.5	ND	ND	ND	0.5	0.7	0.5	ND	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.44	ND	ND	ND	0.37	0.54	0.48	ND	0.49	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HUNTSVILLE
 PLANT : HUNTSVILLE WPCP
 WORKS NUMBER : 110000347
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 4.54 (1000 M3)

REGION : CENTRAL
 DISTRICT : MUSKOKA, DIST. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : MUSKOKA RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,016

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.54	3.31	4.48	5.57	4.80	4.40	3.96	3.55	4.21	3.84	4.49	4.03	4.18	
BOD5														
INFLUENT (MG/L)	165.0	129.0	97.0	85.0	82.0	82.0	88.0	158.0	137.0	169.0	110.0	140.0	120.2	
EFFLUENT (MG/L)	4.9	2.2	2.1	3.0	1.0	8.5	2.8	4.5	2.1	2.0	2.7	4.1	3.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	17.34	7.28	9.40	16.71	4.80	37.40	11.08	15.97	8.84	7.68	12.12	16.52	13.79	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	89.0	144.0	78.0	96.0	196.0	153.0	159.0	195.0	124.0	141.0	84.0	120.0	131.6	
EFFLUENT (MG/L)	6.6	7.0	9.0	13.6	14.0	6.2	4.4	7.7	4.7	7.1	10.9	9.2	8.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	23.36	23.17	40.32	75.75	67.20	27.28	17.42	27.33	19.78	27.26	48.94	37.07	35.11	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.1	5.9	5.1	4.6	5.4	4.2	13.4	7.1	33.1	6.0	4.6	5.1	8.4	
EFFLUENT (MG/L)	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.4	0.3	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.70	0.66	0.89	1.67	0.96	0.88	0.79	1.06	0.84	1.15	1.79	1.20	1.25	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE

START DATE END DATE ANTICIPATED
 COMPLIANCE

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : INNISFIL
 PLANT : INNISFIL (ALCONA) WPCP
 WORKS NUMBER : 110002586
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 7.27 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE SIMCOE
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 8,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.69	1.41	1.78	2.13	2.18	2.35	2.18	2.14	2.01	2.16	2.46	2.17	2.06	
BOD5														
INFLUENT (MG/L)	74.0	83.0	71.9	95.2	188.5	136.0	151.0	312.0	103.0	105.5	110.5	146.5	131.4	
EFFLUENT (MG/L)	1.9	0.5	1.2	0.5	0.7	0.5	1.1	0.7	1.4	0.3	0.3	0.9	0.8	
CONCENTRATION LIMIT (MG/L)													10.0	
LOADING (KG/D)	3.21	0.70	2.13	1.06	1.52	1.17	2.39	1.49	2.81	0.64	0.73	1.95	1.65	
LOADING LIMIT (KG/D)													71.85	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	82.0	173.5	117.8	113.0	293.5	308.0	207.0	604.0	134.0	132.5	107.7	171.5	203.7	
EFFLUENT (MG/L)	1.7	2.5	4.0	3.3	5.0	3.5	3.0	4.0	2.8	1.1	0.6	0.5	2.7	
CONCENTRATION LIMIT (MG/L)													15.0	
LOADING (KG/D)	2.87	3.52	7.12	7.02	10.90	8.22	6.54	8.56	5.62	2.37	1.47	1.08	5.56	
LOADING LIMIT (KG/D)													107.78	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.9	4.9	2.9	3.4	8.6	5.8	6.3	8.8	5.5	5.3	4.3	7.2	5.6	
EFFLUENT (MG/L)	0.1		0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.1	
CONCENTRATION LIMIT (MG/L)													0.3	
LOADING (KG/D)	0.16		0.17	0.21	0.21	0.23	0.21	0.42	0.60	0.43	0.24	0.21	0.21	
LOADING LIMIT (KG/D)													2.16	

SUMMARY

PARAM	CRITERIA	LOADING	CONC	LOADING	COMPLIES WITH
BOD	10.0 MG/L	71.85 KG/D	YES	YES	YES
SS	15.0 MG/L	107.78 KG/D	YES	YES	YES
TP	0.3 MG/L	2.16 KG/D	YES	YES	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : INNISFIL
 PLANT : INNISFIL (ALCONA) WPCP
 WORKS NUMBER : 110002586
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 7.27 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE SIMCOE
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 8,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.69	1.41	1.78	2.13	2.18	2.35	2.18	2.14	2.01	2.16	2.46	2.17	2.06	
BOD5														
INFLUENT (MG/L)	74.0	83.0	71.9	95.2	188.5	136.0	151.0	312.0	103.0	105.5	110.5	146.5	131.4	
EFFLUENT (MG/L)	1.9	0.5	1.2	0.5	0.7	0.5	1.1	0.7	1.4	0.3	0.3	0.9	0.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.21	0.70	2.13	1.06	1.52	1.17	2.39	1.49	2.81	0.64	0.73	1.95	1.65	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	82.0	173.5	117.8	113.0	293.5	308.0	207.0	604.0	134.0	132.5	107.7	171.5	203.7	
EFFLUENT (MG/L)	1.7	2.5	4.0	3.3	5.0	3.5	3.0	4.0	2.8	1.1	0.6	0.5	2.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.87	3.52	7.12	7.02	10.90	8.22	6.54	8.56	5.62	2.37	1.47	1.08	5.56	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.9	4.9	2.9	3.4	8.6	5.8	6.3	8.8	5.5	5.3	4.3	7.2	5.6	
EFFLUENT (MG/L)	0.1		0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.1	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.16		0.17	0.21	0.21	0.23	0.21	0.42	0.60	0.43	0.24	0.21	0.21	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LAKEFIELD
 PLANT : LAKEFIELD LAGOON
 WORKS NUMBER : 110001462
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

DESIGN CAPACITY : 1.59 (1000 M3)

REGION : CENTRAL
 DISTRICT : PETERBOROUGH
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : OTONABEE RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,318

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.65	1.55	1.62	1.89	1.97	1.93	1.36	1.24	1.24	1.64	2.26	1.80	1.68	
LAGOON DISCHARGE	ND	4.38	7.48	11.97	ND	ND	ND	ND	ND	6.03	11.80	ND	8.33	
BOD5														
INFLUENT (MG/L)	ND	ND	62.0	38.0	83.0	70.0	159.0	20.0	148.0	89.0	80.0	ND	83.2	
EFFLUENT (MG/L)	ND	ND	ND	18.8	ND	ND	ND	ND	ND	27.0	17.2	ND	21.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	35.53	ND	ND	ND	ND	ND	44.28	38.87	ND	35.28	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	121.0	98.0	100.0	130.0	130.0	174.0	193.0	137.0	242.0	91.0	181.0	ND	145.2	
EFFLUENT (MG/L)	ND	17.0	ND	18.0	ND	ND	ND	ND	ND	45.7	42.8	ND	30.9	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	26.35	ND	34.02	ND	ND	ND	ND	ND	74.94	96.72	ND	51.91	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	3.6	3.5	3.9	4.8	6.5	1.8	6.8	2.1	5.3	ND	4.3	
EFFLUENT (MG/L)	ND	ND	ND	1.1*	ND	ND	ND	ND	ND	0.9	0.8	ND	0.9	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	ND	ND	ND	2.07	ND	ND	ND	ND	ND	1.47	1.80	ND	1.51	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LINDSAY
 PLANT : LINDSAY LAGOON
 WORKS NUMBER : 110000383
 TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
 : AERATED CELL
 : PHOSPHORUS REMOVAL-CONTINUOUS
 DESIGN CAPACITY : 17.18 (1000 M3)

REGION : CENTRAL
 DISTRICT : VICTORIA
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : SCUGOG RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 15,176

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	13.73	12.83	ND	ND	ND	ND	9.48	9.27	9.57	9.97	16.00	11.77	11.58	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	105.0	80.0	109.0	59.0	70.0	45.0	76.0	93.0	115.0	79.0	93.0	101.0	85.4	
EFFLUENT (MG/L)	10.1	11.7	20.6	20.5	8.6	5.7	15.6	13.6	8.3	2.5	6.6	4.5	10.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	138.67	150.11	ND	ND	ND	ND	147.88	126.07	79.43	24.92	105.60	52.96	123.91	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	137.0	91.0	138.0	53.0	108.0	48.0	81.0	114.0	129.0	108.0	95.0	97.0	99.9	
EFFLUENT (MG/L)	8.0	17.8	22.3	33.3	6.5	4.6	41.1	17.0	11.0	13.3	13.4	6.2	16.2	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	109.84	228.37	ND	ND	ND	ND	389.62	157.59	105.27	132.60	214.40	72.97	187.60	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.3	5.4	4.4	5.2	5.1	3.8	7.5	5.5	6.5	5.9	3.1	4.8	5.3	
EFFLUENT (MG/L)	1.2*	1.7*	1.8*	0.9	0.5	0.7	0.4	0.8	0.7	0.5	0.5	0.4	0.8	3
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	16.47	21.81	ND	ND	ND	ND	3.79	7.41	6.69	4.98	8.00	4.70	9.26	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

EQUIPMENT/MAINTENANCE - NEW EQUIPMENT BEING INSTALLED
 FACILITY EXPANSION/UPGRADING - CONSTRUCTION COMPLETE

START DATE END DATE ANTICIPATED
 COMPLIANCE

1990/01
 1990/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : METRO TORONTO
 PLANT : HIGHLAND CREEK WPCP (SCARBOROUGH)
 WORKS NUMBER : 120000373
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 218.20 (1000 M3)

REGION : CENTRAL
 DISTRICT : METRO TORONTO, MUN. OF
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 310,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	131.00	137.10	167.40	179.90	190.50	200.20	205.80	204.90	199.90	187.30	183.30	166.70	179.50	
<u>BOD5</u>														
INFLUENT (MG/L)	150.0	146.0	141.0	146.0	165.0	167.0	148.0	165.0	149.0	158.0	165.0	158.0	154.8	
EFFLUENT (MG/L)	8.4	8.3	3.8	8.9	8.5	11.7	8.0	7.2	8.3	6.3	5.4	4.6	7.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1100.40	1137.93	636.12	1601.11	1619.25	2342.34	1646.40	1475.28	1659.17	1179.99	989.82	766.82	1346.25	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	197.0	190.0	205.0	190.0	205.0	211.0	196.0	225.0	214.0	202.0	200.0	200.0	202.9	
EFFLUENT (MG/L)	19.3	17.4	18.1	20.8	26.8	26.7	25.7	27.0	27.8	21.8	19.1	21.3	22.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2528.30	2385.54	3029.94	3741.92	5105.40	5345.34	5289.06	5532.30	5557.22	4083.14	3501.03	3550.71	4074.65	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	5.1	5.1	4.8	5.0	4.8	4.8	4.3	4.2	4.6	4.5	4.3	4.6	4.7	
EFFLUENT (MG/L)	0.7	0.6	0.6	0.7	0.7	0.6	0.8	0.6	0.9	0.8	0.5	0.6	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	91.70	82.26	100.44	125.93	133.35	120.12	164.64	122.94	179.91	149.84	91.65	100.02	125.65	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : METRO TORONTO
 PLANT : HUMBER WPCP (ETOBICOKE)
 WORKS NUMBER : 120000382
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 409.14 (1000 M3)

REGION : CENTRAL
 DISTRICT : METRO TORONTO, MUN. OF
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 540,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	385.91	376.86	383.28	407.67	428.22	465.64	421.00	408.00	426.54	389.99	394.56	346.50	402.85	
<u>BOD5</u>														
INFLUENT (MG/L)	218.0	228.0	213.0	158.0	203.0	179.0	153.0	170.0	192.0	174.0	181.0	213.0	190.2	
EFFLUENT (MG/L)	11.0	8.2	4.1	4.7	5.3	10.8	7.4	7.6	5.4	12.0	7.5	4.3	7.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4245.01	3090.25	1571.44	1916.04	2269.56	5028.91	3115.40	3100.80	2303.31	4679.88	2959.20	1489.95	2981.09	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	403.0	372.0	409.0	360.0	292.0	235.0	181.0	206.0	250.0	249.0	203.0	302.0	288.5	
EFFLUENT (MG/L)	21.3	20.2	20.2	16.9	20.0	18.9	10.9	17.1	14.2	17.9	17.4	22.0	18.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8219.88	7612.57	7742.25	6889.62	8564.40	8800.59	4588.90	6976.80	6056.86	6980.82	6865.34	7623.00	7291.59	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	8.8	9.3	10.0	8.5	7.4	6.3	5.4	5.2	6.7	6.2	6.2	7.7	7.3	
EFFLUENT (MG/L)	0.9	1.0	0.7	0.6	0.8	0.8	0.6	0.7	0.7	0.7	0.6	0.7	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	347.31	376.86	268.29	244.60	342.57	372.51	252.60	285.60	298.57	272.99	236.73	242.55	282.00	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : METRO TORONTO
 PLANT : MAIN WPCP (TORONTO)
 WORKS NUMBER : 120000391
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 818.28 (1000 M3)

REGION : CENTRAL
 DISTRICT : METRO TORONTO, MUN. OF
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,250,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	749.00	804.00	863.00	810.50	920.00	1033.00	737.00	724.00	633.00	704.00	683.00	687.70	779.02	
<u>BOD5</u>														
INFLUENT (MG/L)	182.0	189.0	181.0	187.0	201.0	187.0	168.0	163.0	207.0	281.0	210.0	184.0	195.0	
EFFLUENT (MG/L)	15.8	17.3	23.3	20.5	17.7	10.0	11.5	8.9	11.4	14.5	12.8	13.5	14.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1834.20	3909.20	107.90	6615.25	6284.00	330.00	8475.50	6443.60	7216.20	208.00	8742.40	9283.95	11529.50	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	196.0	196.0	210.0	246.0	282.0	240.0	221.0	181.0	192.0	326.0	312.0	250.0	237.7	
EFFLUENT (MG/L)	9.0	14.5	26.5	21.8	16.9	10.9	16.9	13.6	10.2	21.9	15.5	10.4	15.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6741.00	1658.00	2869.50	7668.90	5548.00	1259.70	2455.30	9846.40	6456.60	5417.60	586.50	7152.08	12230.61	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	5.8	5.3	5.3	5.6	6.5	5.6	5.1	4.8	5.5	6.5	5.9	5.8	5.6	
EFFLUENT (MG/L)	0.5	0.6	0.8	0.8	0.7	0.5	0.6	0.5	0.6	0.7	0.5	0.5	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	374.50	482.40	690.40	648.40	644.00	516.50	442.20	362.00	379.80	492.80	341.50	343.85	467.41	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : METRO TORONTO
 PLANT : NORTH TORONTO WPCP (EAST YORK)
 WORKS NUMBER : 120000364
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 45.46 (1000 M3)

REGION : CENTRAL
 DISTRICT : METRO TORONTO, MUN. OF
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : DON RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 85,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	36.80	34.10	30.00	33.70	35.60	36.40	36.50	34.60	36.40	37.50	37.10	36.80	35.46	
<u>BOD5</u>														
INFLUENT (MG/L)	279.0	260.0	240.0	175.0	130.0	157.0	123.0	138.0	117.0	113.0	121.0	108.0	163.4	
EFFLUENT (MG/L)	23.7	23.6	21.3	20.8	4.2	3.6	5.9	6.5	9.2	2.1	3.6	6.5	10.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	872.16	804.76	639.00	700.96	149.52	131.04	215.35	224.90	334.88	78.75	133.56	239.20	386.51	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	155.1	188.0	161.0	161.0	144.0	158.0	134.0	130.0	142.0	151.0	147.0	166.0	153.1	
EFFLUENT (MG/L)	14.4	15.0	33.7	36.7	23.8	6.9	6.9	6.2	5.7	4.5	8.3	10.0	14.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	529.92	511.50	1011.00	1236.79	847.28	251.16	251.85	214.52	207.48	168.75	307.93	368.00	507.08	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	5.5	5.3	5.0	5.0	4.5	4.4	3.9	3.6	4.6	4.1	4.2	5.1	4.6	
EFFLUENT (MG/L)	0.8	0.8	1.3*	1.4*	0.9	0.5	0.5	0.4	0.7	0.6	0.7	0.9	0.8	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	29.44	27.28	39.00	47.18	32.04	18.20	18.25	13.84	25.48	22.50	25.97	33.12	28.37	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW
 EQUIPMENT/MAINTENANCE - NEW EQUIPMENT BEING INSTALLED
 FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING EVALUATED
 FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989/03	1989/05	1989/05
1989/03	1989/05	1989/05
1990/01	1990/12	
1989/06	1990/06	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MIDLAND
 PLANT : MIDLAND WPCP
 WORKS NUMBER : 110000463
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 13.68 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : MIDLAND BAY
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 12,538

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	11.51	11.03	12.68	12.62	12.43	11.91	10.28	10.70	10.74	10.76	11.37	10.15	11.35	
<u>BOD5</u>														
INFLUENT (MG/L)	62.0	74.0	118.0	65.0	70.0	60.0	80.0	63.0	96.0	91.0	77.0	111.0	80.6	
EFFLUENT (MG/L)	4.2	2.9	7.2	13.4	10.4	1.5	3.7	2.5	6.3	1.7	4.9	3.2	5.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	48.34	31.98	91.29	169.10	129.27	17.86	38.03	26.75	67.66	18.29	55.71	32.48	59.02	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	142.0	189.0	254.0	242.0	104.0	107.0	149.0	111.0	174.0	129.0	115.0	183.0	158.3	
EFFLUENT (MG/L)	7.4	7.7	9.7	9.0	6.5	3.1	5.5	5.5	6.7	5.4	5.4	8.7	6.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	85.17	84.93	122.99	113.58	80.79	36.92	56.54	58.85	71.95	58.10	61.39	88.30	76.05	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	4.9	5.4	5.5	5.0	3.8	3.4	5.8	4.2	5.2	5.0	3.8	7.4	5.0	
EFFLUENT (MG/L)	0.6	0.4	0.5	0.4	0.4	0.4	0.8	0.7	0.4	0.5	1.3*	0.6	0.6	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	6.90	4.41	6.34	5.04	4.97	4.76	8.22	7.49	4.29	5.38	14.78	6.09	6.81	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY

SS - ASSESSED ANNUALLY

TP - ASSESSED MONTHLY

* - EXCEEDS EFFLUENT CRITERIA

SPACE (EG. " ") INDICATES A VALUE OF ZERO

ND - NO DATA

NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MILLBROOK
 PLANT : MILLBROOK WPCP
 WORKS NUMBER : 110002238
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.13 (1000 M3)

REGION : CENTRAL
 DISTRICT : PETERBOROUGH
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BAXTER CREEK
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,026

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.93	0.81	0.79	0.99	1.12	0.97	0.80	0.80	0.81	0.91	1.18	0.86	0.91	
<u>BOD5</u>														
INFLUENT (MG/L)	60.5	136.0	125.0	62.0	86.0	117.0	124.0	109.0	115.0	209.0	104.0	96.0	112.0	
EFFLUENT (MG/L)	5.8	3.1	6.4	4.8	6.0	5.2	7.4	5.2	3.8	3.6	4.5	5.9	5.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.39	2.51	5.05	4.75	6.72	5.04	5.92	4.16	3.07	3.27	5.31	5.07	4.64	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	85.7	114.0	224.0	86.0	80.0	170.0	128.0	122.0	130.0	178.0	93.0	66.0	123.1	
EFFLUENT (MG/L)	7.8	6.0	11.5	10.5	7.6	6.0	5.0	5.8	6.5	3.0	2.2	3.7	6.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.25	4.86	9.08	10.39	8.51	5.82	4.00	4.64	5.26	2.73	2.59	3.18	5.73	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	3.5	5.1	6.1	3.9	2.2	5.0	ND	5.3	7.0	8.2	5.7	5.1	5.2	
EFFLUENT (MG/L)	0.2	0.2	0.3	0.4	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.18	0.16	0.23	0.39	0.22	0.09	0.08	0.16	0.16	0.09	0.11	0.08	0.18	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MILTON
 PLANT : MILTON WPCP
 WORKS NUMBER : 120001014
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 12.91 (1000 M3)

REGION : CENTRAL
 DISTRICT : HALTON, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : OAKVILLE CREEK
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 23,203

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	9.90	9.30	10.40	10.50	10.00	10.80	8.90	9.20	9.30	10.00	11.00	9.70	9.92	
BOD5														
INFLUENT (MG/L)	300.0	194.0	296.0	245.0	127.0	177.0	270.0	323.0	290.0	177.0	157.0	195.0	229.3	
EFFLUENT (MG/L)	1.8	2.0	3.2	1.5	0.6	1.0	0.5	0.3	0.6	0.3	2.5	0.7	1.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	17.82	18.60	33.28	15.75	6.00	10.80	4.45	2.76	5.58	3.00	27.50	6.79	12.90	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	182.0	156.0	211.0	199.0	171.0	165.0	253.0	191.0	176.0	200.0	153.0	135.0	182.7	
EFFLUENT (MG/L)	3.3	6.0	5.6	2.6	2.4	2.3	2.3	1.6	3.1	4.3	2.9	4.0	3.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	32.67	55.80	58.24	27.30	24.00	24.84	20.47	14.72	28.83	43.00	31.90	38.80	33.73	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.4	8.5	8.0	6.0	6.0	6.9	9.2	7.3	7.8	8.1	7.3	7.0	7.3	
EFFLUENT (MG/L)	0.2	0.5	0.3	0.3	0.2	0.2	0.1	0.2	0.2	0.3	0.2	0.2	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	1.98	4.65	3.12	3.15	2.00	2.16	0.89	1.84	1.86	3.00	2.20	1.94	1.98	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : MISSISSAUGA
 PLANT : CLARKSON WPCP SOUTH-PEEL SYSTEM
 WORKS NUMBER : 110001328
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 109.10 (1000 M3)

REGION : CENTRAL
 DISTRICT : PEEL, REG. MUN.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 150,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	76.85	75.51	82.92	85.70	83.15	92.23	84.61	88.69	86.02	86.29	91.40	81.78	84.60	
BOD5														
INFLUENT (MG/L)	228.6	213.5	144.5	174.6	171.9	169.7	157.3	148.3	169.8	177.6	157.3	168.3	173.5	
EFFLUENT (MG/L)	15.1	16.2	19.5	9.1	16.0	13.1	13.0	5.6	9.4	9.9	10.3	10.7	12.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1160.43	1223.26	1616.94	779.87	1330.40	1208.21	1099.93	496.66	808.58	854.27	941.42	875.04	1040.58	
LOADING LIMIT (KG/D)													2725.00	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	226.8	197.3	213.3	201.4	159.6	162.2	177.8	291.0	149.1	124.3	157.2	217.4	189.8	
EFFLUENT (MG/L)	9.3	10.4	14.3	11.3	14.9	9.6	8.7	6.7	11.1	9.6	11.0	10.4	10.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	714.70	785.30	1185.75	968.41	1238.93	885.40	736.10	594.22	954.82	828.38	1005.40	850.51	896.76	
LOADING LIMIT (KG/D)													2725.00	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.8	8.5	7.5	6.3	7.3	7.7	6.7	6.5	6.5	6.6	6.4	6.2	7.1	
EFFLUENT (MG/L)	0.9	1.0	0.8	0.8	1.0	0.9	0.8	1.0	1.0	0.7	0.8	0.7	0.9	
CONCENTRATION LIMIT (MG/L)													1.0	
LOADING (KG/D)	69.16	75.51	66.33	68.56	83.15	83.00	67.68	88.69	86.02	60.40	73.12	57.24	76.14	
LOADING LIMIT (KG/D)													109.00	

SUMMARY

PARAM	CRITERIA	LOADING	CONC	LOADING	COMPLIES WITH
BOD	25.0 MG/L	2725.00 KG/D	YES	YES	
SS	25.0 MG/L	2725.00 KG/D	YES	YES	
TP	1.0 MG/L	109.00 KG/D	YES	YES	

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MISSISSAUGA
 PLANT : CLARKSON WPCP SOUTH-PEEL SYSTEM
 WORKS NUMBER : 110001328
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 109.10 (1000 M3)

REGION : CENTRAL
 DISTRICT : PEEL, REG. MUN.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 150,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	76.85	75.51	82.92	85.70	83.15	92.23	84.61	88.69	86.02	86.29	91.40	81.78	84.60	
BOD5														
INFLUENT (MG/L)	228.6	213.5	144.5	174.6	171.9	169.7	157.3	148.3	169.8	177.6	157.3	168.3	173.5	
EFFLUENT (MG/L)	15.1	16.2	19.5	9.1	16.0	13.1	13.0	5.6	9.4	9.9	10.3	10.7	12.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1160.43	1223.26	1616.94	779.87	1330.40	1208.21	1099.93	496.66	808.58	854.27	941.42	875.04	1040.58	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	226.8	197.3	213.3	201.4	159.6	162.2	177.8	291.0	149.1	124.3	157.2	217.4	189.8	
EFFLUENT (MG/L)	9.3	10.4	14.3	11.3	14.9	9.6	8.7	6.7	11.1	9.6	11.0	10.4	10.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	714.70	785.30	1185.75	968.41	1238.93	885.40	736.10	594.22	954.82	828.38	1005.40	850.51	896.76	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.8	8.5	7.5	6.3	7.3	7.7	6.7	6.5	6.5	6.6	6.4	6.2	7.1	
EFFLUENT (MG/L)	0.9	1.0	0.8	0.8	1.0	0.9	0.8	1.0	1.0	0.7	0.8	0.7	0.9	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	69.16	75.51	66.33	68.56	83.15	83.00	67.68	88.69	86.02	60.40	73.12	57.24	76.14	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MISSISSAUGA
 PLANT : LAKEVIEW WPCP SOUTH-PEEL SYSTEM
 WORKS NUMBER : 110001284
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 284.12 (1000 M3)

REGION : CENTRAL
 DISTRICT : PEEL, REG. MUN.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 470,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	246.12	242.33	254.69	269.78	274.47	285.95	253.31	258.41	257.69	247.45	273.71	252.36	259.69	
BOD5														
INFLUENT (MG/L)	293.1	285.7	245.6	ND	ND	ND	284.0	273.6	217.0	250.1	237.7	279.9	263.0	
EFFLUENT (MG/L)	31.0	23.1	18.9	ND	ND	ND	ND	31.3	21.3	20.3	31.9	27.9	25.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7629.72	5597.82	4813.64	ND	ND	ND	ND	8088.23	5488.79	5023.23	8731.34	7040.84	6674.03	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	278.9	281.5	272.0	330.1	257.5	269.8	246.4	261.1	218.0	246.0	265.8	280.4	267.3	
EFFLUENT (MG/L)	7.9	14.2	18.0	17.5	15.1	21.5	11.4	9.3	7.7	12.2	22.0	10.6	14.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1944.34	3441.08	4584.42	4721.15	4144.49	6147.92	2887.73	2403.21	1984.21	3018.89	6021.62	2675.01	3635.66	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.3	8.3	6.8	7.4	7.0	6.0	6.0	6.8	6.1	5.8	7.1	7.3	6.8	
EFFLUENT (MG/L)	0.4	0.8	0.8	0.5	0.8	1.0	0.9	1.0	0.7	0.9	1.0	0.7	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	98.44	193.86	203.75	134.89	219.57	285.95	227.97	258.41	180.38	222.70	273.71	176.65	207.75	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	INSUFFICIENT DATA
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MUSKOKA LAKES
 PLANT : BALA WPCP
 WORKS NUMBER : 120000792
 TREATMENT : COMMUNAL SEPTIC TANK
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT FILTRATION
 DESIGN CAPACITY : 0.09 (1000 M3)

REGION : CENTRAL
 DISTRICT : MUSKOKA, DIST. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LONG LAKE
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 113

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.07	0.04	0.09	0.10	0.11	0.10	0.07	0.08	0.63	0.03	0.06	0.05	0.12	
BOD5														
INFLUENT (MG/L)	25.0	36.0	35.0	31.0	19.0	131.0	72.0	140.0	76.0	30.0	76.0	124.0	66.3	
EFFLUENT (MG/L)	5.0	0.5	0.5	1.2	4.1	2.9	9.9	4.5	5.2	2.1	4.4	4.7	3.8	
LOADING (KG/D)	0.35	0.02	0.04	0.12	0.45	0.29	0.69	0.36	3.27	0.06	0.26	0.23	0.46	
PERCENT REMOVAL	80	99	99	96	78	98	86	97	93	93	94	96	94	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	36.0	34.0	33.0	39.0	24.0	59.0	56.0	106.0	54.0	32.0	34.0	55.0	46.8	
EFFLUENT (MG/L)	15.9	12.0	38.9	40.5	14.8	66.7	39.5	11.8	14.4	10.6	13.0	36.2	26.2	
LOADING (KG/D)	1.11	0.48	3.50	4.05	1.62	6.67	2.76	0.94	9.07	0.31	0.78	1.81	3.14	
PERCENT REMOVAL	56	65	ND	ND	38	ND	29	89	73	67	62	34	44*	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	1.6	2.0	2.0	2.8	1.5	6.5	5.5	4.6	3.6	1.0	4.3	2.4	3.2	
EFFLUENT (MG/L)	0.1		0.2	0.1	0.3	0.4	0.6	0.2	0.1	0.1		0.2	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)			0.01	0.01	0.03	0.04	0.04	0.01	0.06			0.01	0.02	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	NO
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988	1991	1991

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MUSKOKA LAKES
 PLANT : PORT CARLING WPCP
 WORKS NUMBER : 110002229
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 0.54 (1000 M3)

REGION : CENTRAL
 DISTRICT : MUSKOKA, DIST. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : INDIAN RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 700

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.20	0.19	0.25	0.12	0.23	0.24	0.29	0.12	0.10	0.74	0.08	0.07	0.22	
BOD5														
INFLUENT (MG/L)	113.0	135.0	51.0	66.0	78.0	125.0	219.0	218.0	73.0	107.0	42.0	62.0	107.4	
EFFLUENT (MG/L)	1.4	0.5	0.9	0.5	0.5	0.5	0.9	0.5	0.3	0.8	0.6	0.2	0.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.28	0.09	0.22	0.06	0.11	0.12	0.26	0.06	0.03	0.59	0.04	0.01	0.13	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	114.0	165.0	83.0	91.0	85.0	126.0	168.0	122.0	190.0	105.0	51.0	79.0	114.9	
EFFLUENT (MG/L)	2.5	3.5	3.3	0.5	0.5	2.0	5.8	10.0	2.5	0.5	4.3	1.3	3.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.50	0.66	0.82	0.06	0.11	0.48	1.68	1.20	0.25	0.37	0.34	0.09	0.68	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.0	6.6	4.0	5.9	5.6	5.4	7.3	7.1	8.8	6.4	3.8	5.0	6.1	
EFFLUENT (MG/L)	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.1	0.3	0.1	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.02	0.01	0.02	0.01	0.02	0.04	0.05	0.03	0.02	0.07	0.02		0.04	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NEWCASTLE
 PLANT : GRAHAM CREEK WPCP (NEWCASTLE)
 WORKS NUMBER : 110001569
 TREATMENT : EXTENDED AERATION
 :
 :
 :
 DESIGN CAPACITY : 1.81 (1000 M3)

REGION : CENTRAL
 DISTRICT : DURHAM, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,866

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.18	1.06	1.04	1.58	1.88	1.65	1.13	1.13	1.23	1.16	2.39	1.53	1.41	
BOD5														
INFLUENT (MG/L)	ND	210.0	128.0	39.0	94.0	94.0	179.0	88.0	98.0	151.0	55.0	96.0	112.0	
EFFLUENT (MG/L)	8.8	22.7	23.0	14.5	7.0	7.0	11.0	7.8	7.4	22.4	38.9	33.9	17.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.38	24.06	23.92	22.91	13.16	11.55	12.43	8.81	9.10	25.98	92.97	51.86	23.97	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	122.0	290.0	138.0	61.0	123.0	123.0	175.0	138.0	153.0	133.0	49.0	180.0	140.4	
EFFLUENT (MG/L)	11.3	11.9	13.0	12.3	14.3	14.2	16.3	19.3	18.5	12.1	13.9	17.9	14.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	13.33	12.61	13.52	19.43	26.88	23.43	18.41	21.80	22.75	14.03	33.22	27.38	20.59	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	10.5	8.6	2.5	5.7	5.7	6.8	4.5	6.9	6.4	2.8	5.6	6.0	
EFFLUENT (MG/L)	1.4	1.5	2.7	1.4	0.7	0.8	1.3	1.2	1.5	0.4	1.4	1.0	1.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	1.65	1.59	2.80	2.21	1.31	1.32	1.46	1.35	1.84	0.46	3.34	1.53	1.83	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NEWCASTLE
 PLANT : PORT DARLINGTON WPCP
 WORKS NUMBER : 120003076
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 4.54 (1000 M3)

REGION : CENTRAL
 DISTRICT : DURHAM, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 12,831

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	7.60	7.16	7.39	9.07	9.43	8.86	7.65	7.99	8.81	9.92	10.21	7.86	8.50	
BOD5														
INFLUENT (MG/L)	ND	140.0	144.0	113.0	43.0	52.0	339.0	60.0	163.0	45.0	21.0	149.0	115.4	
EFFLUENT (MG/L)	10.6	25.3	13.1	5.5	4.1	23.7	17.1	12.9	4.9	11.8	39.5	36.4	17.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	80.56	181.14	96.80	49.88	38.66	209.98	130.81	103.07	43.16	117.05	403.29	286.10	145.35	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	158.0	160.0	160.0	134.0	35.0	83.0	580.0	47.0	179.0	44.0	26.0	152.0	146.5	
EFFLUENT (MG/L)	11.0	14.8	15.3	12.2	14.8	23.0	10.8	7.6	9.6	12.0	12.6	15.0	13.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	83.60	105.96	113.06	110.65	139.56	203.78	82.62	60.72	84.57	119.04	128.64	117.90	112.20	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.3	5.2	5.3	4.0	4.8	6.1	7.9	6.5	6.3	4.5	3.9	4.9	5.4	
EFFLUENT (MG/L)	0.7	0.7	0.9	0.5	0.6	0.9	0.9	0.7	0.8	0.4	0.6	0.9	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	5.32	5.01	6.65	4.53	5.65	7.97	6.88	5.59	7.04	3.96	6.12	7.07	5.95	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989/01 1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NORWOOD
 PLANT : NORWOOD WPCP
 WORKS NUMBER : 110001499
 TREATMENT : OXIDATION DITCH
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.72 (1000 M3)

REGION : CENTRAL
 DISTRICT : PETERBOROUGH
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : OUSE RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,135

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.55	0.55	0.55	0.55	0.55	0.51	0.46	0.44	0.46	0.50	0.66	0.59	0.53	
BOD5														
INFLUENT (MG/L)	101.0	192.5	114.0	152.0	119.0	122.0	119.0	124.0	155.5	122.0	130.0	141.0	132.7	
EFFLUENT (MG/L)	6.9	12.4	7.6	5.0	2.1	3.4	1.0	1.2	1.1	4.8	5.0	21.0	6.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.79	6.82	4.18	2.75	1.15	1.73	0.46	0.52	0.50	2.40	3.30	12.39	3.18	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	126.5	363.0	226.0	187.0	178.0	163.0	165.5	127.0	221.5	149.0	196.5	156.5	188.3	
EFFLUENT (MG/L)	6.4	7.0	8.5	6.5	3.5	10.0	2.5	3.5	3.5	4.1	4.6	7.4	5.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.52	3.85	4.67	3.57	1.92	5.10	1.15	1.54	1.61	2.05	3.03	4.36	2.97	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.3	7.5	8.3	7.9	6.6	6.2	6.6	5.7	8.9	7.0	6.5	6.4	7.1	
EFFLUENT (MG/L)	0.7	0.7	0.9	0.4	0.7	0.9	0.6	0.6	0.6	0.7	0.5	0.7	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.38	0.38	0.49	0.22	0.38	0.45	0.27	0.26	0.27	0.35	0.33	0.41	0.37	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : OAKVILLE
 PLANT : SOUTH EAST WPCP
 WORKS NUMBER : 120000998
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 22.73 (1000 M3)

REGION : CENTRAL
 DISTRICT : HALTON, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 21,900

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	17.30	16.80	16.60	18.10	17.10	18.80	18.80	20.50	20.40	20.70	23.50	20.50	19.09	
BOD5														
INFLUENT (MG/L)	170.0	313.0	155.0	71.0	115.0	83.0	83.0	71.0	120.0	123.0	125.0	82.0	125.9	
EFFLUENT (MG/L)	6.4	5.0	8.7	11.0	9.3	5.0	5.0	9.2	2.0	1.2	5.8	4.1	6.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	110.72	84.00	144.42	199.10	159.03	94.00	94.00	188.60	40.80	24.84	136.30	84.05	116.45	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	195.0	147.0	101.0	132.0	184.0	117.0	117.0	53.0	97.0	88.0	145.0	133.0	125.8	
EFFLUENT (MG/L)	7.2	5.6	12.0	13.0	13.4	9.9	9.9	9.4	4.0	4.4	8.0	8.0	8.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	124.56	94.08	199.20	235.30	229.14	186.12	186.12	192.70	81.60	91.08	188.00	164.00	166.08	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	5.9	5.6	5.0	5.8	4.7	4.7	4.6	4.4	5.8	6.3	6.0	5.4	
EFFLUENT (MG/L)	0.7	0.6	0.9	0.7	0.6	1.0	1.0	0.9	0.3	0.3	0.4	0.8	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	12.11	10.08	14.94	12.67	10.26	18.80	18.80	18.45	6.12	6.21	9.40	16.40	13.36	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : OAKVILLE
 PLANT : SOUTH WEST WPCP
 WORKS NUMBER : 120001005
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 47.73 (1000 M3)

REGION : CENTRAL
 DISTRICT : HALTON, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 58,200

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	31.10	29.30	33.70	38.30	40.32	41.99	33.34	36.16	36.62	36.59	41.78	32.98	36.02	
BOD5														
INFLUENT (MG/L)	290.0	222.0	330.0	128.0	219.0	219.0	303.0	216.0	187.0	200.0	236.0	380.0	244.2	
EFFLUENT (MG/L)	4.5	4.3	6.1	4.7	7.0	7.0	7.0	3.6	5.2	6.5	2.5	6.2	5.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	139.95	125.99	205.57	180.01	282.24	293.93	233.38	130.17	190.42	237.83	104.45	204.47	194.51	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	236.0	135.0	315.0	171.0	209.0	209.0	277.0	165.0	165.0	83.0	310.0	167.0	203.5	
EFFLUENT (MG/L)	8.2	10.7	11.3	9.8	10.1	10.1	10.0	8.9	8.8	7.4	3.2	13.0	9.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	255.02	313.51	380.81	375.34	407.23	424.09	333.40	321.82	322.25	270.76	133.69	428.74	334.99	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.4	8.6	8.2	5.7	6.5	4.1	6.1	7.0	7.4	6.6	7.9	6.4	6.8	
EFFLUENT (MG/L)	0.7	0.7	0.8	0.9	0.7	0.8	0.9	0.7	0.9	1.0	0.6	0.8	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	21.77	20.51	26.96	34.47	28.22	33.59	30.00	25.31	32.95	36.59	25.06	26.38	28.82	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : OMEMEE
 PLANT : OMEMEE LAGOON
 WORKS NUMBER : 110001630
 TREATMENT : LAGOON AND SPRAY
 : NO DISCHARGE
 :
 DESIGN CAPACITY : 0.61 (1000 M3)

REGION : CENTRAL
 DISTRICT : VICTORIA
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : NO DISC.TO SURFACE WATER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 653

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.26	0.24	0.29	0.37	0.41	0.29	0.20	0.22	0.22	0.36	0.61	0.34	0.32	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	126.0	161.0	182.0	97.0	88.0	280.0	242.0	255.0	171.0	174.0	97.0	110.0	165.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	66.0	297.0	318.0	145.0	120.0	154.0	191.0	218.0	107.0	156.0	89.0	92.0	162.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.8	15.0	9.7	4.5	4.5	15.0	15.0	11.3	8.1	8.1	5.2	5.9	9.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:

BOD - HAS NO CRITERIA
 SS - HAS NO CRITERIA
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : ORILLIA
 PLANT : ORILLIA WPCP
 WORKS NUMBER : 120000569
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 21.04 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE SIMCOE
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 24,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	18.73	16.96	21.60	27.80	22.84	20.51	16.75	16.87	18.35	18.99	25.92	18.18	20.29	
BOD5														
INFLUENT (MG/L)	120.0	166.0	61.0	71.0	86.0	94.0	137.0	91.0	136.0	106.0	ND	90.0	105.3	
EFFLUENT (MG/L)	9.7	10.8	6.1	7.8	3.9	9.3	18.7	13.0	29.8	21.0	7.6	25.2	13.6	
CONCENTRATION LIMIT (MG/L)													15.0	
LOADING (KG/D)	181.68	183.16	131.76	216.84	89.07	190.74	313.22	219.31	546.83	398.79	196.99	458.13	275.94	
LOADING LIMIT (KG/D)														
SUSPENDED SOLIDS														
INFLUENT (MG/L)	166.0	169.0	130.0	112.0	162.0	179.0	209.0	179.0	222.0	175.0	103.0	92.0	158.2	
EFFLUENT (MG/L)	17.9	11.5	14.0	16.0	8.2	6.0	4.4	6.5	10.3	10.0	9.7	19.5	11.2	
CONCENTRATION LIMIT (MG/L)													15.0	
LOADING (KG/D)	335.26	195.04	302.40	444.80	187.28	123.06	73.70	109.65	189.00	189.90	251.42	354.51	227.25	
LOADING LIMIT (KG/D)														
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.1	5.0	2.4	2.7	3.2	4.1	4.1	2.7	4.4	4.9	1.3	5.1	3.7	
EFFLUENT (MG/L)	0.6	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.3	0.3	0.5	0.4*	
CONCENTRATION LIMIT (MG/L)													0.3	
LOADING (KG/D)	11.23	6.78	6.48	8.34	6.85	6.15	3.35	5.06	7.34	5.69	7.77	9.09	8.12	
LOADING LIMIT (KG/D)														

SUMMARY

PARAM	CRITERIA	LOADING	COMPLIES WITH CONC	LOADING
BOD	15.0 MG/L	NA	YES	NA
SS	15.0 MG/L	NA	YES	NA
TP	0.3 MG/L	NA	NO	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED

ANTICIPATED
 START DATE END DATE COMPLIANCE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ORILLIA
 PLANT : ORILLIA WPCP
 WORKS NUMBER : 120000569
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 21.04 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE SIMCOE
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 24,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	18.73	16.96	21.60	27.80	22.84	20.51	16.75	16.87	18.35	18.99	25.92	18.18	20.29	
BOD5														
INFLUENT (MG/L)	120.0	166.0	61.0	71.0	86.0	94.0	137.0	91.0	136.0	106.0	ND	90.0	105.3	
EFFLUENT (MG/L)	9.7	10.8	6.1	7.8	3.9	9.3	18.7	13.0	29.8	21.0	7.6	25.2	13.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	181.68	183.16	131.76	216.84	89.07	190.74	313.22	219.31	546.83	398.79	196.99	458.13	275.94	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	166.0	169.0	130.0	112.0	162.0	179.0	209.0	179.0	222.0	175.0	103.0	92.0	158.2	
EFFLUENT (MG/L)	17.9	11.5	14.0	16.0	8.2	6.0	4.4	6.5	10.3	10.0	9.7	19.5	11.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	335.26	195.04	302.40	444.80	187.28	123.06	73.70	109.65	189.00	189.90	251.42	354.51	227.25	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.1	5.0	2.4	2.7	3.2	4.1	4.1	2.7	4.4	4.9	1.3	5.1	3.7	
EFFLUENT (MG/L)	0.6	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.3	0.3	0.5	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	11.23	6.78	6.48	8.34	6.85	6.15	3.35	5.06	7.34	5.69	7.77	9.09	8.12	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

START DATE END DATE ANTICIPATED
 COMPLIANCE

FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : OSHAWA
 PLANT : HARMONY CR WPCP NO 1
 WORKS NUMBER : 120000774
 TREATMENT : TRICKLING FILTER
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 34.09 (1000 M3)

REGION : CENTRAL
 DISTRICT : DURHAM, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE :
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 102,938

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	18.38	17.46	16.90	21.72	17.63	22.65	19.00	18.61	18.58	19.34	ND	24.58	19.53	
BOD5														
INFLUENT (MG/L)	168.0	104.0	99.0	92.0	124.0	171.0	146.0	131.0	137.0	130.0	89.0	167.0	129.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	292.0	173.0	210.0	132.0	212.0	317.0	219.0	144.0	138.0	175.0	89.0	251.0	196.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.9	6.2	2.7	4.8	4.7	5.7	5.1	5.7	5.8	6.3	3.1	10.1	5.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO DIRECT DISCHARGE
SS	25.0 MG/L	NO DIRECT DISCHARGE
TP	1.0 MG/L	NO DIRECT DISCHARGE

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : OSHAWA
 PLANT : HARMONY CR WPCP NO 2
 WORKS NUMBER : 120001657
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 34.09 (1000 M3)

REGION : CENTRAL
 DISTRICT : DURHAM, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE :
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 51,469

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	25.72	28.60	28.69	28.91	34.84	27.49	23.88	22.93	25.07	29.89	35.28	27.55	28.24	
<u>BOD5</u>														
INFLUENT (MG/L)	190.0	177.0	158.0	140.0	133.0	184.0	426.0	153.0	161.0	110.0	65.0	192.0	174.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	178.0	264.0	52.0	118.0	168.0	162.0	564.0	116.0	147.0	93.0	78.0	225.0	180.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	7.1	9.4	8.3	8.0	5.0	7.5	8.2	8.5	8.4	6.9	3.7	8.7	7.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO DIRECT DISCHARGE
SS	25.0 MG/L	NO DIRECT DISCHARGE
TP	1.0 MG/L	NO DIRECT DISCHARGE

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : OSHAWA
 PLANT : HARMONY CREEK 1&2 COMBINED EFFLUENT
 WORKS NUMBER : 120003254
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : TRICKLING FILTER
 : PHOSPHORUS REMOVAL-CONTINUOUS
 DESIGN CAPACITY : 0.00 (1000 M3)

REGION : CENTRAL
 DISTRICT : DURHAM, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : L. ONT. (COMBINED EFF. 1&2)
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED :

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	44.09	46.06	45.60	50.63	52.48	50.14	42.88	41.55	43.66	49.23	63.49	52.12	48.49	
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	17.7	24.5	25.6	14.7	13.8	18.0	41.7	39.6	26.0	35.1	27.4	33.7	26.5*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	780.39	1128.47	1167.36	744.26	724.22	902.52	1788.09	1645.38	1135.16	1727.97	1739.62	1756.44	1284.99	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	17.0	17.3	22.4	14.6	17.7	21.9	16.5	21.1	13.5	16.8	15.8	21.2	18.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	749.53	796.83	1021.44	739.19	928.89	1098.06	707.52	876.70	589.41	827.06	1003.14	1104.94	872.82	
TOTAL PHOSPHORUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	0.8	0.9	0.9	0.7	0.9	0.9	1.0	1.0	0.9	0.9	0.8	1.3*	0.9	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	35.27	41.45	41.04	35.44	47.23	45.12	42.88	41.55	39.29	44.30	50.79	67.75	43.64	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - ENFORCING SEWER-USE BYLAWS
 OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED
 EQUIPMENT/MAINTENANCE - EXISTING EQUIPMENT BEING REPAIRED

START DATE	END DATE	ANTICIPATED COMPLIANCE
	1990/12	1990/01
	1990/01	1990/01
1990/07	1990/08	1990/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PENETANGUISHENE
 PLANT : FOX ST. WPCP
 WORKS NUMBER : 120001960
 TREATMENT : CONTACT STABILIZATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.50 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : PENETANGUISHENE HARBOUR
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,100

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.13	1.06	1.30	1.31	1.22	1.16	1.05	0.91	0.97	1.03	1.18	1.04	1.11	
BOD5														
INFLUENT (MG/L)	91.0	113.0	82.0	73.0	96.0	93.0	106.0	166.0	94.0	80.0	94.0	72.0	96.7	
EFFLUENT (MG/L)	8.2	4.4	2.5	10.7	10.3	2.1	4.1	1.0	3.7	3.5	2.2	2.8	4.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.26	4.66	3.25	14.01	12.56	2.43	4.30	0.91	3.58	3.60	2.59	2.91	5.11	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	58.0	133.0	104.0	84.0	156.0	15.0	151.0	180.0	113.0	101.0	134.0	100.0	110.8	
EFFLUENT (MG/L)	13.7	12.0	6.0	25.0	9.5	2.0	8.5	2.5	12.0	10.5	2.7	5.6	9.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	15.48	12.72	7.80	32.75	11.59	2.32	8.92	2.27	11.64	10.81	3.18	5.82	10.21	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.3	5.2	4.0	3.2	4.7	5.0	5.4	6.1	4.4	3.8	3.3	14.2	5.3	
EFFLUENT (MG/L)	1.1*	0.5	0.4	0.4	0.5	0.5	0.6	0.6	0.9	0.8	0.5	0.5	0.6	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	1.24	0.53	0.52	0.52	0.61	0.58	0.63	0.54	0.87	0.82	0.59	0.52	0.67	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

START DATE END DATE ANTICIPATED
 COMPLIANCE

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW
 OPERATIONAL/PROCESS - OPERATIONAL PROCEDURES BEING UPGRADED
 FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING EVALUATED
 FACILITY EXPANSION/UPGRADING - APPLICATION FOR FUNDING

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PENETANGUISHENE
 PLANT : PENETANGUISHENE WPCP MAIN ST PLANT I1
 WORKS NUMBER : 120000541
 TREATMENT : CONTACT STABILIZATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 3.00 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : PENETANG BAY
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	2.16	9.93	3.11	3.01	2.84	2.59	2.13	3.48	2.59	2.99	2.67	3.41	
BOD5														
INFLUENT (MG/L)	ND	92.0	ND	80.0	75.0	117.0	125.0	145.0	178.0	5.0	99.0	103.0	101.9	
EFFLUENT (MG/L)	ND	1.2	ND	7.6	4.9	7.8	10.8	8.2	6.8	2.0	15.7	5.6	7.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	2.59	ND	23.63	14.74	22.15	27.97	17.46	23.66	5.18	46.94	14.95	24.21	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	124.0	ND	120.0	104.0	148.0	142.0	129.0	146.0	272.0	125.0	123.0	143.3	
EFFLUENT (MG/L)	ND	3.0	ND	12.3	5.5	6.8	7.8	5.5	16.1	3.0	8.1	4.0	7.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	6.48	ND	38.25	16.55	19.31	20.20	11.71	56.02	7.77	24.21	10.68	24.55	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	4.0	ND	3.0	3.5	4.8	4.4	5.3	4.1	5.3	4.1	4.7	4.3	
EFFLUENT (MG/L)	ND	0.6	ND	0.4	0.6	0.7	0.5	1.0	1.7*	0.6	1.8*	0.5	0.8	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	1.29	ND	1.24	1.80	1.98	1.29	2.13	5.91	1.55	5.38	1.33	2.73	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PERCY
 PLANT : WARKWORTH LAGOON
 WORKS NUMBER : 120001933
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.39 (1000 M3)

REGION : CENTRAL
 DISTRICT : NORTHUMBERLAND
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : MILL CREEK
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 457

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.26	0.24	0.26	0.27	0.32	0.32	0.25	0.24	0.25	0.27	0.32	0.32	0.28	
LAGOON DISCHARGE	ND	ND	ND	ND	14.60	ND	ND	ND	ND	ND	ND	ND	14.60	
BOD5														
INFLUENT (MG/L)	250.0	91.0	118.0	50.0	70.0	70.0	90.0	116.0	84.0	52.0	108.0	104.0	100.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	4.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	1.40	ND	ND	ND	ND	ND	ND	ND	1.23	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	96.0	120.0	170.0	80.0	99.0	99.0	87.0	79.0	81.0	55.0	99.0	101.0	97.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	29.0	ND	ND	ND	ND	ND	ND	ND	29.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	9.28	ND	ND	ND	ND	ND	ND	ND	8.12	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.9	ND	ND	3.0	5.8	5.8	4.2	6.5	5.6	5.6	5.9	7.5	5.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.6	ND	ND	ND	ND	ND	ND	ND	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.19	ND	ND	ND	ND	ND	ND	ND	0.17	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PETERBOROUGH
 PLANT : PETERBOROUGH WPCP
 WORKS NUMBER : 120000676
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 68.19 (1000 M3)

REGION : CENTRAL
 DISTRICT : PETERBOROUGH
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : OTONABEE RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 62,945

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	45.62	44.20	46.44	53.20	56.76	59.13	50.52	50.07	53.88	50.98	64.70	48.99	52.04	
BOD5														
INFLUENT (MG/L)	118.0	118.0	142.0	122.0	98.0	78.0	87.0	92.0	101.0	98.0	92.0	116.0	105.2	
EFFLUENT (MG/L)	11.7	13.7	13.1	11.2	6.1	6.8	3.8	5.6	6.0	6.5	20.1	17.7	10.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	533.75	605.54	608.36	595.84	346.23	402.08	191.97	280.39	323.28	331.37	1300.47	867.12	530.81	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	146.0	143.0	177.0	128.0	113.0	100.0	126.0	142.0	ND	114.0	98.0	109.0	126.9	
EFFLUENT (MG/L)	9.0	10.0	11.0	11.0	7.0	5.0	4.0	4.0	12.0	9.0	9.0	16.0	8.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	410.58	442.00	510.84	585.20	397.32	295.65	202.08	200.28	646.56	458.82	582.30	783.84	463.16	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.3	4.8	4.9	4.4	3.4	3.7	4.0	4.1	4.3	4.3	3.6	4.3	4.3	
EFFLUENT (MG/L)	0.9	1.0	1.0	1.0	0.8	1.0	1.0	1.0	0.9	1.0	0.8	1.0	1.0	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	41.05	44.20	46.44	53.20	45.40	59.13	50.52	50.07	48.49	50.98	51.76	48.99	52.04	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PICKERING
 PLANT : DUFFIN CREEK WPCP (YORK-DURHAM)
 WORKS NUMBER : 120001915
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 181.84 (1000 M3)

REGION : CENTRAL
 DISTRICT : DURHAM, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 64,386

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	187.41	184.69	187.90	102.32	213.52	218.62	188.21	197.69	208.04	206.72	233.04	196.01	193.68	
BOD5														
INFLUENT (MG/L)	158.0	183.0	193.0	171.0	179.0	144.0	162.0	177.0	194.0	172.0	117.0	142.0	166.0	
EFFLUENT (MG/L)	20.6	21.2	21.9	20.4	26.5	27.6	13.9	27.1	27.7	31.6	30.5	32.6	25.1*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3860.64	3915.42	4115.01	2087.32	5658.28	6033.91	2616.11	5357.39	5762.70	6532.35	7107.72	6389.92	4861.37	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	282.0	284.0	289.0	295.0	273.0	238.0	269.0	305.0	243.0	254.0	190.0	184.0	258.8	
EFFLUENT (MG/L)	16.5	15.7	16.5	12.0	21.6	19.7	24.7	19.0	18.3	17.9	47.0	17.2	20.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3092.26	2899.63	3100.35	1227.84	4612.03	4306.81	4648.78	3756.11	3807.13	3700.28	952.88	3371.37	3970.44	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.8	6.4	6.6	6.1	5.2	6.4	7.1	6.1	6.2	6.5	5.6	6.0	6.3	
EFFLUENT (MG/L)	0.8	0.6	1.0	0.5	1.0	1.0	0.9	1.0	0.9	1.0	1.3*	0.6	0.9	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	149.92	110.81	187.90	51.16	213.52	218.62	169.38	197.69	187.23	206.72	302.95	117.60	174.31	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - CONDUCTING TREATABILITY STUDIES
 FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989/08	1990/01	
1989	1992	1990/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PORT HOPE
 PLANT : PORT HOPE WPCP
 WORKS NUMBER : 120000079
 TREATMENT : HIGH RATE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 9.09 (1000 M3)

REGION : CENTRAL
 DISTRICT : NORTHUMBERLAND
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 9,700

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.42	3.98	4.93	6.75	6.63	6.32	4.54	4.43	4.84	5.08	7.56	4.14	5.30	
BOD5														
INFLUENT (MG/L)	186.0	162.0	193.0	164.0	178.0	162.0	129.0	110.0	96.0	113.0	94.0	82.0	139.1	
EFFLUENT (MG/L)	17.5	19.1	19.8	13.3	8.5	6.3	5.1	2.7	2.6	3.0	2.3	4.6	8.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	77.35	76.01	97.61	89.77	56.35	39.81	23.15	11.96	12.58	15.24	17.38	19.04	46.11	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	100.0	93.0	114.0	88.0	100.0	111.0	92.0	109.0	100.0	116.0	92.0	86.0	100.1	
EFFLUENT (MG/L)	10.9	10.3	10.3	10.3	7.4	4.0	5.6	6.1	5.9	5.9	6.3	4.1	7.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	48.17	40.99	50.77	69.52	49.06	25.28	25.42	27.02	28.55	29.97	47.62	16.97	38.69	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.7	3.1	3.6	2.7	2.7	2.9	2.7	2.9	2.9	2.9	2.6	2.8	2.9	
EFFLUENT (MG/L)	0.6	0.8	1.0	0.8	0.6	0.6	0.8	0.5	1.0	1.0	0.6	0.8	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	2.65	3.18	4.93	5.40	3.97	3.79	3.63	2.21	4.84	5.08	4.53	3.31	4.24	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PORT MCNICOLL
 PLANT : PORT MCNICOLL WPCP
 WORKS NUMBER : 110001417
 TREATMENT : CONTACT STABILIZATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.04 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : GEORGIAN BAY
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,926

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.82	0.63	0.98	1.04	0.94	0.75	0.58	0.54	0.69	0.67	1.02	0.66	0.78	
BOD5														
INFLUENT (MG/L)	60.5	105.5	93.0	58.8	84.1	81.0	56.8	118.5	94.9	69.6	97.5	87.8	84.0	
EFFLUENT (MG/L)	12.2	10.1	8.8	3.4	9.2	9.6	8.7	9.3	6.9	3.6	5.9	5.4	7.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.00	6.36	8.62	3.53	8.64	7.20	5.04	5.02	4.76	2.41	6.01	3.56	6.08	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	60.5	129.0	108.0	88.0	82.5	101.0	104.0	123.0	121.5	78.0	76.0	124.0	99.6	
EFFLUENT (MG/L)	7.9	7.5	7.0	10.0	4.8	4.3	7.3	5.0	3.8	1.1	3.8	5.3	5.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.47	4.72	6.86	10.40	4.51	3.22	4.23	2.70	2.62	0.73	3.87	3.49	4.45	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.8	5.9	5.8	4.0	3.0	5.6	4.9	6.1	5.0	4.7	3.8	5.1	4.8	
EFFLUENT (MG/L)	0.3	0.4	0.3	0.2	0.3	0.3	0.4	0.4	0.4	0.3	0.2	0.3	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.24	0.25	0.29	0.20	0.28	0.22	0.23	0.21	0.27	0.20	0.20	0.19	0.23	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SCUGOG
 PLANT : NONQUON RIVER LAGOON (PORT PERRY)
 WORKS NUMBER : 110001257
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT CHLORINATION
 DESIGN CAPACITY : 3.64 (1000 M3)

REGION : CENTRAL
 DISTRICT : DURHAM, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE SCUGOG
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 5,215

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.11	1.96	2.04	2.54	2.91	2.65	1.98	1.98	2.06	2.20	3.19	2.20	2.32	
LAGOON DISCHARGE	ND	ND	ND	313.67	209.12	ND	ND	ND	ND	ND	77.14	118.61	179.64	
BOD5														
INFLUENT (MG/L)	ND	143.0	154.0	151.0	173.0	ND	158.0	413.0	178.0	150.0	62.0	155.0	173.7	
EFFLUENT (MG/L)	ND	ND	ND	14.2	7.9	ND	ND	ND	ND	ND	13.0	6.1	10.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	36.06	22.98	ND	ND	ND	ND	ND	41.47	13.42	23.90	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	196.0	209.0	244.0	164.0	244.0	120.0	143.0	414.0	221.0	193.0	83.0	157.0	199.0	
EFFLUENT (MG/L)	ND	ND	ND	26.3	15.3	ND	ND	ND	ND	ND	6.0	3.3	12.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	66.80	44.52	ND	ND	ND	ND	ND	19.14	7.26	29.46	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	11.4	10.7	8.7	16.1	8.4	7.1	41.2	7.7	6.9	3.0	8.3	11.8	
EFFLUENT (MG/L)	ND	ND	ND	0.5	0.3	ND	ND	ND	ND	ND	0.2	0.1	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	1.27	0.87	ND	ND	ND	ND	ND	0.63	0.22	0.70	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENVIRONMENTAL ASSESSMENT BEING CONDUCTED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989/03	1989/08	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SMITH
 PLANT : WOODLAND ACRES WPCP
 WORKS NUMBER : 110002381
 TREATMENT : EXTENDED AERATION
 :
 :
 DESIGN CAPACITY : 0.36 (1000 M3)

REGION : CENTRAL
 DISTRICT : PETERBOROUGH
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : OTONABEE R.
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 435

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.17	0.17	0.23	0.28	0.30	0.34	0.16	0.13	0.18	0.19	0.19	0.20	0.21	
BOD5														
INFLUENT (MG/L)	38.0	35.0	71.0	18.0	21.0	48.0	64.0	104.0	67.0	84.0	74.0	38.0	55.2	
EFFLUENT (MG/L)	10.4	3.2	2.5	1.5	1.0	1.9	0.8	0.3	0.3	0.2	3.2	4.1	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.76	0.54	0.57	0.42	0.30	0.64	0.12	0.03	0.05	0.03	0.60	0.82	0.53	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	41.0	62.0	140.0	36.0	57.0	60.0	87.0	118.0	133.0	132.0	93.0	31.0	82.5	
EFFLUENT (MG/L)	11.3	7.3	7.5	3.0	4.5	3.2	2.5	4.5	3.3	0.5	5.9	6.9	5.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.92	1.24	1.72	0.84	1.35	1.08	0.40	0.58	0.59	0.09	1.12	1.38	1.05	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.1	2.8	3.0	1.1	0.9	2.6	2.8	11.3	5.4	5.0	3.1	1.5	3.6	
EFFLUENT (MG/L)	3.0	1.3	0.6	0.3	0.4	0.7	0.7	0.7	0.5	0.5	0.6	0.7	0.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.51	0.22	0.13	0.08	0.12	0.23	0.11	0.09	0.09	0.09	0.11	0.14	0.17	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED

START DATE END DATE ANTICIPATED
 COMPLIANCE

1989/03

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : STAYNER
 PLANT : STAYNER LAGOON
 WORKS NUMBER : 110000695
 TREATMENT : AERATED CELL PLUS LAGOON
 : SEASONAL DISCHARGE
 : PHOSPHORUS REMOVAL - BATCH
 DESIGN CAPACITY : 1.04 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAMONT CREEK
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,975

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.86	1.50	1.65	1.82	1.65	1.50	1.30	1.23	1.15	1.32	1.45	1.41	1.49	
LAGOON DISCHARGE	46.93	41.99	51.15	112.72	76.65	ND	83.60	ND	83.60	76.65	ND	ND	71.66	
BOD5														
INFLUENT (MG/L)	293.0	883.0	166.0	662.0	370.0	858.0	822.0	218.0	351.0	799.0	1,040.0	612.0	589.5	
EFFLUENT (MG/L)	ND	ND	ND	18.3	31.8	ND	11.1	ND	11.5	17.8	ND	ND	18.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	33.30	52.47	ND	14.43	ND	13.22	23.49	ND	ND	26.97	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	172.0	190.0	179.0	217.0	193.0	213.0	279.0	175.0	290.0	270.0	253.0	220.0	220.9	
EFFLUENT (MG/L)	ND	ND	ND	21.7	35.0	ND	29.0	ND	23.0	22.8	ND	ND	26.3*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	39.49	57.75	ND	37.70	ND	26.45	30.09	ND	ND	39.19	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.2	8.1	6.2	9.5	8.6	19.2	9.8	7.4	15.3	9.8	18.7	12.6	10.9	
EFFLUENT (MG/L)	ND	ND	ND	0.3	0.8	ND	0.3	ND	0.5	ND	ND	ND	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	ND	ND	ND	0.54	1.32	ND	0.39	ND	0.57	ND	ND	ND	0.75	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW
 COLLECTION SYSTEM - INFILTRATION PROBLEMS BEING CORRECTED
 OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED
 OPERATIONAL/PROCESS - CONVERTING TO ALTERNATIVE PROCESS
 FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1991/07	1991/08
1991/11	1991/08

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TOTTENHAM
 PLANT : TOTTENHAM WPCP (MUN OCT 1 1989)
 WORKS NUMBER : 110002531
 TREATMENT : SUTTON PROCESS
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 2.25 (1000 M3)

REGION : CENTRAL
 DISTRICT : GREY
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE :
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED :

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.31	1.32	1.42	1.77	1.82	1.56	1.29	1.28	1.42	1.34	1.76	1.33	1.47	
BOD5														
INFLUENT (MG/L)	106.5	157.5	134.0	139.0	96.5	112.5	117.5	156.0	133.5	146.0	135.0	172.0	133.8	
EFFLUENT (MG/L)	4.1	2.2	4.8	10.4	4.2	7.2	2.3	4.8	1.8	0.8	3.5	0.2	3.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	5.37	2.90	6.81	18.40	7.64	11.23	2.96	6.14	2.55	1.07	6.16	0.26	5.73	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	127.5	192.0	236.0	243.5	145.0	194.0	171.5	158.5	268.5	174.0	176.0	204.0	190.9	
EFFLUENT (MG/L)	7.7	4.0	17.5	27.8	5.8	10.2	6.3	4.0	7.5	2.5	4.0	0.2	8.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	10.08	5.28	24.85	49.20	10.55	15.91	8.12	5.12	10.65	3.35	7.04	0.26	11.91	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	10.2	9.3	13.6	6.9	6.8	9.9	9.4	11.1	16.1	7.1	5.8	6.9	9.4	
EFFLUENT (MG/L)	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.4	0.3	0.2	0.3	0.4	0.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.26	0.26	0.42	0.53	0.54	0.31	0.25	0.51	0.42	0.26	0.52	0.53	0.44	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - HAS NO CRITERIA
 SS - HAS NO CRITERIA
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : UXBRIDGE
 PLANT : UXBRIDGE BROOK WPCP
 WORKS NUMBER : 120000756
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 3.63 (1000 M3)

REGION : CENTRAL
 DISTRICT : DURHAM, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : UXBRIDGE BROOK
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,550

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.13	0.97	1.05	1.24	1.65	1.51	1.23	1.66	1.69	1.67	3.73	2.53	1.67	
BOD5														
INFLUENT (MG/L)	186.0	271.0	140.0	131.0	75.0	184.0	122.0	164.0	198.0	166.0	87.0	172.0	158.0	
EFFLUENT (MG/L)	6.7	0.8	8.6	4.2	6.8	0.5	2.6	0.2	0.3	1.2	0.8	5.8	3.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.57	0.77	9.03	5.20	11.22	0.75	3.19	0.33	0.50	2.00	2.98	14.67	5.34	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	180.0	199.0	272.0	134.0	100.0	195.0	236.0	140.0	256.0	139.0	97.0	149.0	174.8	
EFFLUENT (MG/L)	10.0	5.5	26.5	21.5	23.5	2.3	7.5	2.5	3.0	1.4	0.5	2.4	8.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	11.30	5.33	27.82	26.66	38.77	3.47	9.22	4.15	5.07	2.33	1.86	6.07	14.86	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	11.5	2.6	6.2	3.6	4.0	2.6	6.4	5.6	7.3	6.2	4.0	5.7	5.5	
EFFLUENT (MG/L)	0.3	0.1	0.3	0.2	0.2	0.1	0.2	ND	0.2	0.2		0.1	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.33	0.09	0.31	0.24	0.33	0.15	0.24	ND	0.33	0.33		0.25	0.33	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENVIRONMENTAL ASSESSMENT BEING CONDUCTED

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989/01	1990/03	
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : VAUGHAN
 PLANT : KLEINBURG WPCP
 WORKS NUMBER : 120000417
 TREATMENT : EXTENDED AERATION
 :
 :
 DESIGN CAPACITY : 0.22 (1000 M3)

REGION : CENTRAL
 DISTRICT : YORK, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : HUMBER RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 900

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.19	0.19	0.20	0.23	0.23	0.24	0.16	0.21	0.19	0.19	0.29	0.21	0.21	
BOD5														
INFLUENT (MG/L)	151.0	142.0	126.0	82.0	85.0	189.0	119.0	93.0	50.0	117.0	37.0	181.0	114.3	
EFFLUENT (MG/L)	5.9	5.6	3.2	10.6	0.7	1.8	3.2	3.7	2.8	2.4	2.6	10.4	4.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.12	1.06	0.64	2.43	0.16	0.43	0.51	0.77	0.53	0.45	0.75	2.18	0.92	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	116.0	191.0	165.0	58.0	86.0	191.0	141.0	97.0	57.0	115.0	57.0	165.0	119.9	
EFFLUENT (MG/L)	8.2	9.3	9.2	17.5	6.8	6.1	4.0	9.3	7.5	4.3	5.0	8.7	8.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.55	1.76	1.84	4.02	1.56	1.46	0.64	1.95	1.42	0.81	1.45	1.82	1.68	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.8	8.4	6.8	4.5	3.8	8.4	5.0	5.4	5.0	16.8	2.8	6.4	6.6	
EFFLUENT (MG/L)	4.7	4.7	4.2	3.3	3.7	4.6	3.9	4.0	3.9	3.9	2.9	3.9	4.0	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.89	0.89	0.84	0.75	0.85	1.10	0.62	0.84	0.74	0.74	0.84	0.81	0.84	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : VICTORIA HARBOUR
 PLANT : VICTORIA HARBOUR WPCP
 WORKS NUMBER : 120003227
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 2.36 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : GEORGIAN BAY
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,016

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.52	0.47	0.60	0.65	0.76	0.61	0.64	0.62	0.59	0.53	0.61	0.46	0.59	
BOD5														
INFLUENT (MG/L)	94.0	61.0	82.0	43.0	65.5	73.5	96.5	120.3	131.0	92.0	59.0	82.2	83.3	
EFFLUENT (MG/L)	5.4	0.5	0.5	0.6	2.0	0.5	4.9	0.4	0.4	0.4	2.0	2.8	1.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.80	0.23	0.30	0.39	1.52	0.30	3.13	0.24	0.23	0.21	1.22	1.28	1.00	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	99.5	99.5	135.0	50.0	77.5	110.5	205.5	171.7	311.5	259.0	82.6	69.6	139.3	
EFFLUENT (MG/L)	2.0	2.5	2.5	3.5	4.8	2.4	2.8	2.5	4.0	1.9	0.5	0.7	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.04	1.17	1.50	2.27	3.64	1.46	1.79	1.55	2.36	1.00	0.30	0.32	1.48	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.5	3.6	4.1	2.8	2.9	4.5	5.5	5.5	5.0	4.5	3.4	3.8	4.1	
EFFLUENT (MG/L)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2		0.1	0.1	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.05	0.04	0.06	0.06	0.07	0.06	0.06	0.06	0.11	0.10		0.04	0.06	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WASAGA BEACH
 PLANT : WASAGA BEACH WPCP (SUM.POP.SERV.73000)
 WORKS NUMBER : 120001862
 TREATMENT : EXTENDED AERATION
 : EFFLUENT POLISHING
 : EXFILTRATION
 DESIGN CAPACITY : 5.77 (1000 M3)

REGION : CENTRAL
 DISTRICT : SIMCOE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : NO DISC.TO SURFACE WATER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,090

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.81	0.74	1.27	1.00	1.21	1.39	2.34	1.96	1.25	1.01	0.93	0.92	1.24	
<u>BOD5</u>														
INFLUENT (MG/L)	85.0	115.5	236.5	172.0	124.0	65.5	253.5	119.0	92.5	77.0	85.5	67.5	124.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	144.5	122.0	397.5	220.0	84.5	82.0	337.5	126.5	95.0	66.0	64.0	68.5	150.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	5.4	5.5	8.1	5.6	4.6	3.4	7.1	6.5	4.6	4.2	4.2	4.2	5.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	25.0 MG/L	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:

BOD - HAS NO CRITERIA
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WHITBY
 PLANT : CORBETT CREEK WPCP
 WORKS NUMBER : 120000738
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 36.36 (1000 M3)

REGION : CENTRAL
 DISTRICT : DURHAM, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 26,100

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	23.19	23.62	22.71	25.12	27.16	29.36	27.67	24.86	26.94	27.89	28.12	16.92	25.30	
BOD5														
INFLUENT (MG/L)	117.0	186.0	204.0	93.0	83.0	89.0	121.0	120.0	98.0	116.0	102.0	157.0	123.8	
EFFLUENT (MG/L)	10.9	18.3	22.0	9.5	12.1	12.1	18.5	4.1	16.1	18.7	17.7	32.0	16.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	252.77	432.24	499.62	238.64	328.63	355.25	511.89	101.92	433.73	521.54	497.72	541.44	404.80	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	172.0	294.0	296.0	220.0	155.0	118.0	118.0	131.0	218.0	214.0	159.0	177.0	189.3	
EFFLUENT (MG/L)	15.0	17.1	26.3	22.5	23.7	14.8	15.9	12.5	17.3	21.9	23.4	13.5	18.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	347.85	403.90	597.27	565.20	643.69	434.52	439.95	310.75	466.06	610.79	658.00	228.42	473.11	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	11.2	11.9	11.5	10.8	9.5	9.6	9.6	94.5	10.2	10.8	9.6	8.6	17.3	
EFFLUENT (MG/L)	0.8	0.8	0.9	0.8	1.0	1.0	0.7	0.8	0.8	0.9	1.0	1.0	0.9	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	18.55	18.89	20.43	20.09	27.16	29.36	19.36	19.88	21.55	25.10	28.12	16.92	22.77	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - CONDUCTING TREATABILITY STUDIES
 FACILITY EXPANSION/UPGRADING - ENVIRONMENTAL ASSESSMENT BEING CONDUCTED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989/07	1989/11	
1989/10	1990/03	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WHITBY
 PLANT : PRINGLE CREEK WPCP NO 1
 WORKS NUMBER : 120000747
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 5.68 (1000 M3)

REGION : CENTRAL
 DISTRICT : DURHAM, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : PRINGLE CREEK
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 10,925

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.96	2.65	2.67	3.81	3.62	3.31	2.05	2.70	2.54	2.24	3.25	2.51	2.86	
BOD5														
INFLUENT (MG/L)	ND	181.0	81.0	254.0	171.0	129.0	411.0	226.0	81.0	181.0	79.0	343.0	194.3	
EFFLUENT (MG/L)	11.2	8.6	16.3	14.3	18.2	7.5	33.0	4.0	16.4	9.3	34.8	5.1	14.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	33.15	22.79	43.52	54.48	65.88	24.82	67.65	10.80	41.65	20.83	113.10	12.80	42.61	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	485.0	609.0	522.0	344.0	401.0	439.0	438.0	581.0	545.0	668.0	448.0	614.0	507.8	
EFFLUENT (MG/L)	12.0	15.7	12.7	6.2	13.2	20.8	27.5	19.7	44.9	24.5	16.8	11.2	18.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	35.52	41.60	33.90	23.62	47.78	68.84	56.37	53.19	114.04	54.88	54.60	28.11	53.77	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.9	5.9	6.0	5.3	5.3	5.6	7.0	7.6	6.2	6.3	5.2	6.8	6.1	
EFFLUENT (MG/L)	0.6	0.7	0.4	0.6	0.5	0.6	0.5	0.6	0.7	0.5	0.4	0.5	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	1.77	1.85	1.06	2.28	1.81	1.98	1.02	1.62	1.77	1.12	1.30	1.25	1.72	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WHITBY
 PLANT : PRINGLE CREEK WPCP NO 2
 WORKS NUMBER : 120003101
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 9.09 (1000 M3)

REGION : CENTRAL
 DISTRICT : DURHAM, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : PRINGLE CREEK
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 10,925

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.08	3.45	3.61	5.41	5.95	4.41	2.88	4.06	3.46	3.07	5.84	3.67	4.16	
BOD5														
INFLUENT (MG/L)	ND	181.0	81.0	254.0	171.0	129.0	411.0	226.0	81.0	181.0	79.0	543.0	212.5	
EFFLUENT (MG/L)	9.1	25.6	31.4	8.5	9.3	2.5	8.3	8.0	3.1	4.9	16.1	5.6	11.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	37.12	88.32	113.35	45.98	55.33	11.02	23.90	32.48	10.72	15.04	94.02	20.55	45.76	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	485.0	609.0	522.0	344.0	401.0	439.0	438.0	581.0	545.0	668.0	448.0	614.0	507.8	
EFFLUENT (MG/L)	13.7	15.9	14.2	20.0	16.3	10.6	13.2	17.2	19.4	10.8	9.7	13.7	14.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	55.89	54.85	51.26	108.20	96.98	46.74	38.01	69.83	67.12	33.15	56.64	50.27	60.74	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.9	5.9	6.0	5.3	5.3	5.6	7.0	7.6	6.2	6.3	5.2	6.8	6.1	
EFFLUENT (MG/L)	0.7	0.6	0.5	0.6	0.4	0.5	0.4	0.6	0.8	0.5	0.5	0.8	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	2.85	2.07	1.80	3.24	2.38	2.20	1.15	2.43	2.76	1.53	2.92	2.93	2.50	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WHITCHURCH-STOUFFVILLE
 PLANT : STOUFFVILLE WPCP
 WORKS NUMBER : 120000408
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 3.86 (1000 M3)

REGION : CENTRAL
 DISTRICT : YORK, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : DUFFIN CREEK
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 5,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.31	3.16	3.25	3.50	3.83	3.78	3.38	3.56	3.68	3.49	4.03	3.35	3.53	
BOD5														
INFLUENT (MG/L)	107.0	128.0	85.0	73.0	94.0	84.0	96.0	116.0	85.0	114.0	78.0	125.0	98.8	
EFFLUENT (MG/L)	3.5	3.8	4.5	3.6	1.5	3.6	1.8	3.5	0.5	0.3	1.8	1.8	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	11.58	12.00	14.62	12.60	5.74	13.60	6.08	12.46	1.84	1.04	7.25	6.03	8.83	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	111.0	224.0	140.0	168.0	128.0	107.0	117.0	137.0	122.0	133.0	94.0	158.0	136.6	
EFFLUENT (MG/L)	2.9	3.7	5.3	5.0	4.5	1.5	0.3	2.0	4.2	0.9	1.9	2.0	2.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.59	11.69	17.22	17.50	17.23	5.67	1.01	7.12	15.45	3.14	7.65	6.70	10.24	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.8	6.3	4.3	4.4	4.4	5.4	4.2	5.4	5.2	5.3	4.0	5.8	5.0	
EFFLUENT (MG/L)	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.5	0.3	0.4	0.4	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.99	0.94	0.97	1.05	1.53	1.13	1.01	1.42	1.84	1.04	1.61	1.34	1.41	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

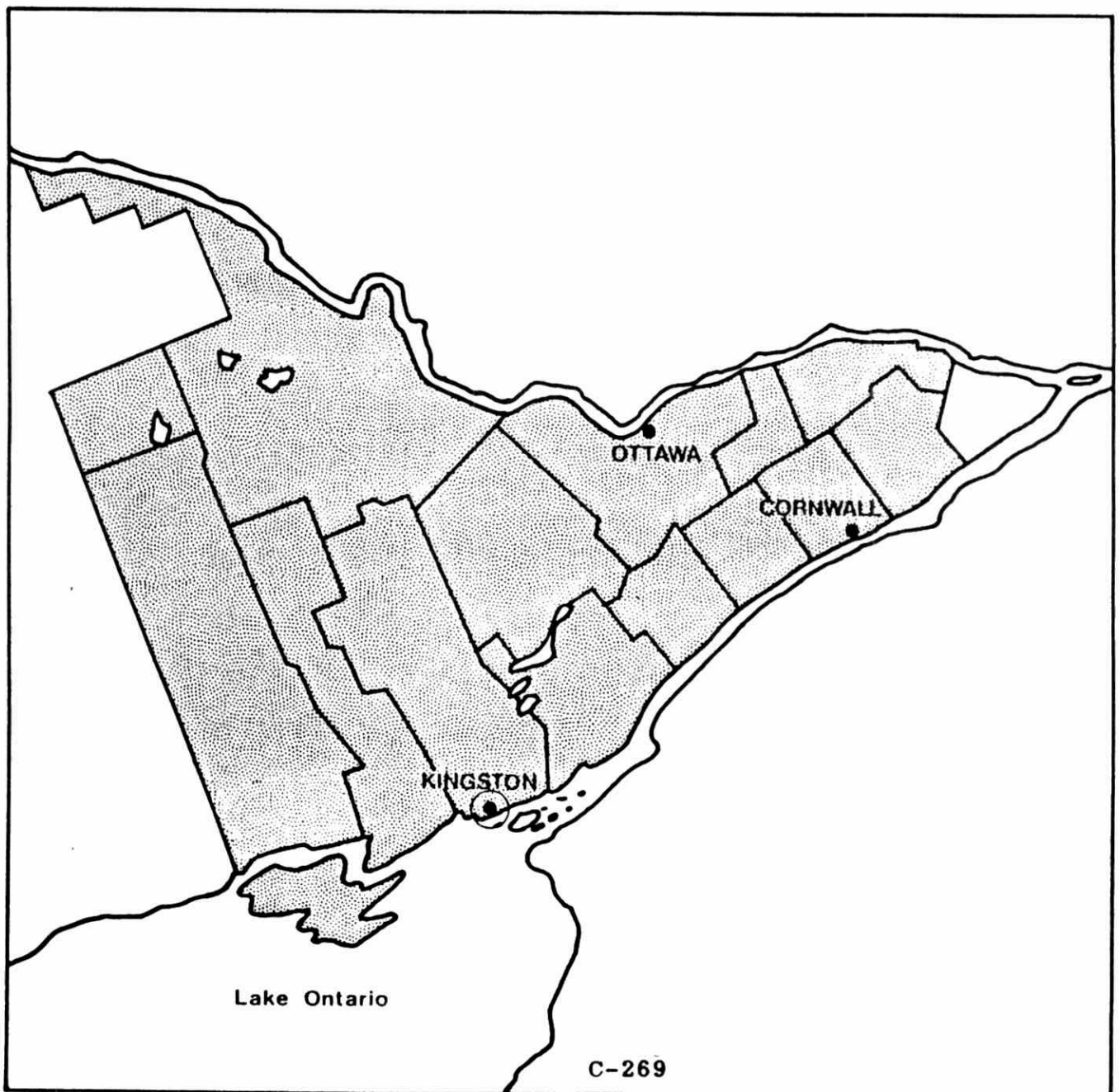
Southeastern Region

④



Ministry
of the
Environment

Ontario



C-269

Southeastern Region

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SUB-OFFICES

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15 Victoria Ave.
K8N 1Z5
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Pembroke
1000 MacKay St.
K8B 1A3
(613) 732-3643

SOUTHEAST SUMMARY – 1989

Treatment Type	Number			Design Capacity (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Primary	2	13	15	10.23	559.73	569.96
Conventional Activated Sludge	4	3	7	96.03	40.00	136.03
Modified Activated Sludge	1	0	1	12.27	–	12.27
Contact Stabilization	1	2	3	1.36	8.68	10.04
Extended Aeration	11	4	15	7.87	3.87	11.74
High Rate	1	0	1	5.46	–	5.46
Communal Septic Tank	1	0	1	1.74	–	1.74
Convent. Lagoon Continuous	1	1	2	2.39	5.91	8.30
Conventional Lagoon Seasonal	10	3	13	9.76	6.01	15.77
Lagoon and Spray	1	1	2	0.34	0.36	0.70
Aerated Cell Plus Lagoon	3	0	3	15.62	–	15.62
Conventional Lagoon Annual	3	1	4	3.30	1.23	4.52
TOTALS	39	28	67	166.37	625.79	792.16

1000M3/D: Thousands of cubic meters per day

ADF: Average Daily Flow

SOUTHEAST SUMMARY - 1989

Treatment Type	Number			Annual ADF (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Primary	2	13	15	9.01	632.31	641.32
Conventional Activated Sludge	4	3	7	60.55	35.01	95.56
Modified Activated Sludge	1	0	1	7.92	0.00	7.92
Contact Stabilization	1	2	3	1.59	4.27	5.86
Extended Aeration	11	4	15	6.25	2.15	8.40
High Rate	1	0	1	4.32	0.00	4.32
Communal Septic Tank	1	0	1	0.00	0.00	0.00
Convent. Lagoon Continuous	1	1	2	2.36	5.04	7.40
Conventional Lagoon Seasonal	10	3	13	7.68	7.25	14.93
Lagoon and Spray	1	1	2	0.22	0.00	0.22
Aerated Cell Plus Lagoon	3	0	3	10.36	0.00	10.36
Conventional Lagoon Annual	3	1	4	0.85	0.44	1.29
TOTALS	39	28	67	111.11	686.47	797.58

1000M3/D: Thousands of cubic meters per day
ADF: Average Daily Flow

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ALEXANDRIA
 PLANT : ALEXANDRIA LAGOON
 WORKS NUMBER : 110000846
 TREATMENT : AERATED CELL PLUS LAGOON
 : CONTINUOUS DISCHARGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 DESIGN CAPACITY : 6.81 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : STORMONT, DUNDAS AND GLENGARRY
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : DELISLE R
 MINOR BASIN : ST. LAWRENCE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.46	5.49	7.04	8.00	6.48	6.31	4.65	5.25	4.91	5.38	7.50	5.29	5.98	
LAGOON DISCHARGE	169.38	153.77	218.16	240.07	200.87	189.33	144.23	162.87	147.37	166.74	225.00	164.00	181.82	
BOD5														
INFLUENT (MG/L)	ND	72.0	80.0	36.0	27.0	85.0	57.0	61.0	94.0	108.0	97.0	314.0	93.7	
EFFLUENT (MG/L)	ND	42.0	43.0	16.0	5.4	12.1	15.0	4.3	8.7	10.3	12.3	13.6	16.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	230.58	302.72	128.00	34.99	76.35	69.75	22.57	42.71	55.41	92.25	71.94	99.27	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	71.0	90.0	54.0	45.0	72.0	51.0	56.0	64.0	82.0	57.0	3.0	5.0	54.2	
EFFLUENT (MG/L)	25.7	34.9	29.9	21.0	17.5	12.0	7.3	9.9	14.6	13.5	12.9	20.0	18.3	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	140.32	191.60	210.49	168.00	113.40	75.72	33.94	51.97	71.68	72.63	96.75	105.80	109.43	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.1	2.9	2.9	1.9	3.0	3.7	1.4	1.8	2.4	1.8	2.8	4.8	2.6	
EFFLUENT (MG/L)	0.5	1.0	0.9	0.7	0.7	0.6	0.4	0.5	0.2	0.5	0.6	0.7	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.73	5.49	6.33	5.60	4.53	3.78	1.86	2.62	0.98	2.69	4.50	3.70	3.59	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ALFRED
 PLANT : ALFRED LAGOON
 WORKS NUMBER : 110001836
 TREATMENT : CONVENTIONAL LAGOON ANNUAL
 :
 :
 DESIGN CAPACITY : 0.71 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : PRESCOTT AND RUSSELL
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : RUISSEAU DES ATOCAS
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,055

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.47	0.43	0.49	0.55	0.63	0.66	0.48	0.52	0.48	0.53	0.59	0.45	0.52	
LAGOON DISCHARGE	ND	ND	ND	76.00	170.40	ND	ND	ND	ND	ND	ND	ND	123.20	
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	149.0	84.0	188.0	115.0	195.0	121.0	176.0	445.0	184.1	
EFFLUENT (MG/L)	ND	ND	ND	59.0	4.0	ND	ND	ND	ND	ND	ND	ND	31.5*	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	275.0	350.0	160.0	157.0	1,220.0	185.0	983.0	178.0	221.0	242.0	441.0	900.0	442.7	
EFFLUENT (MG/L)	ND	ND	ND	29.8	15.0	ND	ND	ND	ND	ND	ND	ND	22.4	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.7	5.3	7.8	4.9	7.6	5.4	10.8	8.5	15.9	5.7	4.0	16.3	8.2	
EFFLUENT (MG/L)	ND	ND	ND	5.5	2.0	ND	ND	ND	ND	ND	ND	ND	3.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	NO
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ALMONTE
 PLANT : ALMONTE LAGOON
 WORKS NUMBER : 110000873
 TREATMENT : AERATED CELL PLUS LAGOON
 : SEASONAL DISCHARGE
 : PHOSPHORUS REMOVAL - BATCH
 DESIGN CAPACITY : 5.45 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : LANARK
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MISSISSIPPI RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,040

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.44	1.35	2.79	3.06	2.93	1.95	1.91	1.46	1.41	1.75	3.14	2.01	2.10	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	207.0	160.0	112.0	160.0	46.0	66.0	11.0	ND	76.0	122.0	48.0	365.0	124.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	10.1	ND	ND	ND	ND	ND	ND	19.5	14.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	29.59	ND	ND	ND	ND	ND	ND	39.19	31.08	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	173.0	142.0	137.0	226.0	196.0	62.0	153.0	ND	75.0	228.0	51.0	671.0	192.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	18.1	ND	ND	ND	ND	ND	ND	29.5	23.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	53.03	ND	ND	ND	ND	ND	ND	59.29	49.98	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.2	6.7	5.4	3.2	3.8	4.5	0.7	ND	6.0	7.8	5.3	21.9	6.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.4	ND	ND	ND	ND	ND	ND	0.7	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	1.17	ND	ND	ND	ND	ND	ND	1.40	1.26	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ARNPRIOR
 PLANT : ARNPRIOR WPCP
 WORKS NUMBER : 120000621
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 6.81 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : RENFREW
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : MADAWASKA RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 5,800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.65	4.29	6.67	6.30	6.82	5.46	5.15	4.75	5.31	5.42	6.36	4.60	5.48	
BOD5														
INFLUENT (MG/L)	86.0	84.0	104.0	67.0	29.0	55.0	70.0	78.0	82.0	60.0	60.0	87.0	71.8	
EFFLUENT (MG/L)	63.0	55.5	60.0	52.0	27.0	41.5	37.5	56.0	57.0	34.5	35.0	62.5	48.5	
LOADING (KG/D)	292.95	238.09	400.20	327.60	184.14	226.59	193.12	266.00	302.67	186.99	222.60	287.50	265.78	
PERCENT REMOVAL	27	34	42	22	07	25	46	28	30	43	42	28	32*	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	90.0	64.0	95.0	73.0	61.0	57.0	73.0	68.0	55.0	69.0	49.0	63.0	68.1	
EFFLUENT (MG/L)	32.0	29.1	39.1	27.0	34.2	27.9	26.8	30.0	25.8	25.0	19.0	24.5	28.4	
LOADING (KG/D)	148.80	124.83	260.79	170.10	233.24	152.33	138.02	142.50	136.99	135.50	120.84	112.70	155.63	
PERCENT REMOVAL	64	55	59	63	44	51	63	56	53	64	61	61	58*	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.2	3.1	3.0	2.7	2.6	2.7	2.7	2.8	2.5	2.6	2.6	2.8	2.8	
EFFLUENT (MG/L)	0.9	1.1*	1.0	0.7	0.6	0.6	0.7	0.8	0.7	0.6	0.6	1.0	0.8	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	4.18	4.71	6.67	4.41	4.09	3.27	3.60	3.80	3.71	3.25	3.81	4.60	4.38	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	50%	NO
SS	70%	NO
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENVIRONMENTAL ASSESSMENT BEING CONDUCTED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988	1992	1992

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BANCROFT
 PLANT : BANCROFT WPCP
 WORKS NUMBER : 110001239
 TREATMENT : CONTACT STABILIZATION
 :
 :
 :
 DESIGN CAPACITY : 4.13 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : HASTINGS
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : YORK RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,095

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.09	1.07	1.24	1.37	1.43	1.37	1.21	1.12	1.07	1.13	1.25	1.17	1.21	
BOD5														
INFLUENT (MG/L)	116.0	ND	ND	58.0	59.0	57.0	49.0	67.0	65.0	99.0	96.0	90.0	75.6	
EFFLUENT (MG/L)	4.5	ND	3.0	13.0	17.5	14.5	2.0	9.0	20.0	8.8	12.5	18.0	11.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.90	ND	3.72	17.81	25.02	19.86	2.42	10.08	21.40	9.94	15.62	21.06	13.55	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	155.0	128.0	113.0	84.0	60.0	80.0	93.0	102.0	94.0	124.0	125.0	115.0	106.1	
EFFLUENT (MG/L)	7.7	8.5	5.4	6.8	9.3	11.6	9.0	9.0	12.4	5.8	11.2	9.0	8.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8.39	9.09	6.69	9.31	13.29	15.89	10.89	10.08	13.26	6.55	14.00	10.53	10.65	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.3	ND	ND	2.0	3.2	4.3	4.2	5.1	6.4	5.5	4.8	4.7	4.6	
EFFLUENT (MG/L)	2.9	ND	1.8	0.7	1.1	2.2	2.1	2.5	3.7	2.5	5.9	2.4	2.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	3.16	ND	2.23	0.95	1.57	3.01	2.54	2.80	3.95	2.82	7.37	2.80	3.03	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BARRY'S BAY
 PLANT : BARRY'S BAY WPCP
 WORKS NUMBER : 110001854
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.24 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : RENFREW
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : KAMANISKEG LAKE
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,413

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.37	0.36	0.40	0.44	0.44	0.49	0.51	0.50	0.50	0.43	0.35	0.28	0.42	
BOD5														
INFLUENT (MG/L)	213.0	200.0	148.0	163.0	163.0	112.0	160.0	160.0	133.0	ND	182.0	240.0	170.4	
EFFLUENT (MG/L)	2.5	3.0	3.5	4.0	4.0	2.0	2.5	2.5	4.0	2.5	3.0	3.0	3.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.92	1.08	1.40	1.76	1.76	0.98	1.27	1.25	2.00	1.07	1.05	0.84	1.26	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	211.0	247.0	204.0	189.0	189.0	151.0	182.0	182.0	259.0	ND	271.0	240.0	211.4	
EFFLUENT (MG/L)	10.1	9.8	9.7	11.4	11.4	8.0	7.7	7.7	8.5	8.6	7.3	6.3	8.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.73	3.52	3.88	5.01	5.01	3.92	3.92	3.85	4.25	3.69	2.55	1.76	3.74	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.5	7.4	7.2	7.0	7.0	6.8	7.1	7.1	7.4	ND	6.2	5.0	6.8	
EFFLUENT (MG/L)	0.7	0.6	0.7	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.5	0.4	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.25	0.21	0.28	0.22	0.22	0.29	0.30	0.30	0.35	0.30	0.17	0.11	0.25	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BATH
 PLANT : BATH WPCP
 WORKS NUMBER : 120000177
 TREATMENT : EXTENDED AERATION
 :
 :
 :
 DESIGN CAPACITY : 1.16 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : LENNOX & ADDINGTON
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.02	0.98	1.07	0.80	0.85	0.88	0.56	1.16	0.91	0.95	1.15	0.86	0.93	
BOD5														
INFLUENT (MG/L)	187.0	82.0	357.0	142.0	95.0	169.0	168.0	340.0	185.0	175.0	340.0	213.0	204.4	
EFFLUENT (MG/L)	4.0	4.0	5.0	6.0	4.0	1.5	3.0	2.0	2.2	3.0	2.0	59.6	8.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.08	3.92	5.35	4.80	3.40	1.32	1.68	2.32	2.00	2.85	2.30	51.25	7.44	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	99.0	62.0	218.0	116.0	170.0	118.0	126.0	182.0	101.0	164.0	258.0	166.0	148.3	
EFFLUENT (MG/L)	9.5	7.0	18.5	13.5	7.0	4.0	7.0	2.5	7.3	10.0	14.0	44.6	12.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.69	6.86	19.79	10.80	5.95	3.52	3.92	2.90	6.64	9.50	16.10	38.35	11.25	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	3.7	10.3	6.2	4.7	6.3	4.7	7.8	5.3	5.8	9.7	6.8	6.4	
EFFLUENT (MG/L)	2.1	2.8	3.8	2.4	2.4	4.5	3.5	2.9	3.9	2.5	3.6	4.4	3.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.14	2.74	4.06	1.92	2.04	3.96	1.96	3.36	3.54	2.37	4.14	3.78	2.98	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BELLEVILLE
 PLANT : BELLEVILLE WPCP (163500 M3/D.PRIMARY)
 WORKS NUMBER : 110000016
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 54.55 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : HASTINGS
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BAY OF QUINTE
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 35,351

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	27.39	23.60	26.96	36.11	30.74	29.24	25.33	22.84	23.58	26.51	44.70	33.94	29.25	
<u>BOD5</u>														
INFLUENT (MG/L)	204.0	284.0	145.0	252.0	161.0	93.0	100.0	91.0	145.0	127.0	112.0	ND	155.8	
EFFLUENT (MG/L)	20.5	16.5	9.0	22.2	13.9	8.8	8.3	12.9	11.0	10.0	25.2	10.5	14.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	561.49	389.40	242.64	801.64	427.28	257.31	210.23	294.63	259.38	265.10	1126.44	356.37	412.43	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	126.0	119.0	128.0	123.0	116.0	113.0	116.0	112.0	156.0	118.0	127.0	ND	123.1	
EFFLUENT (MG/L)	9.1	8.4	6.9	13.2	7.1	7.7	10.6	5.5	4.1	8.0	32.5	7.9	10.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	249.24	198.24	186.02	476.65	218.25	225.14	268.49	125.62	96.67	212.08	1452.75	268.12	295.43	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	4.9	5.3	5.0	3.7	3.7	3.9	4.3	4.8	5.1	4.1	3.9	ND	4.4	
EFFLUENT (MG/L)	0.2	0.4	0.6	0.6	0.4	0.4	0.3	0.5	0.4	0.4	0.7	0.4	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	5.47	9.44	16.17	21.66	12.29	11.69	7.59	11.42	9.43	10.60	31.29	13.57	11.70	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BROCKVILLE
 PLANT : BROCKVILLE WPCP
 WORKS NUMBER : 120000122
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 21.82 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : LEEDS AND GRENVILLE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : ST. LAWRENCE RIVER
 MINOR BASIN : ST. LAWRENCE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 20,607

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	17.91	16.75	19.47	22.04	22.37	18.53	16.56	15.16	15.43	15.07	20.53	15.71	17.96	
<u>BOD5</u>														
INFLUENT (MG/L)	96.0	75.0	74.0	40.0	85.0	63.0	62.0	38.0	99.0	60.0	75.0	150.0	76.4	
EFFLUENT (MG/L)	61.5	52.0	62.5	22.0	24.0	52.0	30.0	18.0	35.5	26.0	25.5	46.0	37.9	
LOADING (KG/D)	1101.46	871.00	1216.87	484.88	536.88	963.56	496.80	272.88	547.76	391.82	523.51	722.66	680.68	
PERCENT REMOVAL	36	31	16	45	72	17	52	53	64	57	66	69	50	
PERCENT REMOVAL LIMITS													50	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	91.0	111.0	94.0	60.0	127.0	86.0	81.0	64.0	123.0	80.0	88.0	148.0	96.1	
EFFLUENT (MG/L)	42.6	38.6	56.0	24.0	33.6	35.8	23.6	23.5	34.8	24.6	32.6	41.8	34.3	
LOADING (KG/D)	762.96	646.55	1090.32	528.96	751.63	663.37	390.81	356.26	536.96	370.72	669.27	656.67	616.03	
PERCENT REMOVAL	53	65	40	60	74	58	71	63	72	69	63	72	64*	
PERCENT REMOVAL LIMITS													70	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	4.7	4.8	4.1	2.9	4.8	5.4	3.8	3.6	4.7	4.3	4.1	6.9	4.5	
EFFLUENT (MG/L)	2.3*	2.0*	1.5*	1.0	1.1*	1.6*	0.9	1.0	1.5*	1.5*	1.2*	2.6*	1.5	9
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	41.19	33.50	29.20	22.04	24.60	29.64	14.90	15.16	23.14	22.60	24.63	40.84	26.94	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	NO
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

INFLUENT SEWAGE - ENFORCING SEWER USE BYLAW
 OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED
 FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989/10		
1989/10		
1989/10		

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CARLETON PLACE
 PLANT : CARLETON PLACE WPCP
 WORKS NUMBER : 110000971
 TREATMENT : HIGH RATE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 5.45 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : LANARK
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MISSISSIPPI RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 6,600

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.66	3.66	4.43	4.76	5.11	4.70	4.22	3.75	3.76	3.99	5.73	4.11	4.32	
<u>BOD5</u>														
INFLUENT (MG/L)	49.0	88.0	107.0	56.0	ND	57.0	50.0	ND	79.0	90.0	54.0	75.0	70.5	
EFFLUENT (MG/L)	36.0	45.0	52.0	26.0	ND	12.0	27.4	32.3	32.7	30.5	16.4	35.1	31.4*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	131.76	164.70	230.36	123.76	ND	56.40	115.62	121.12	122.95	121.69	93.97	144.26	135.65	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	59.0	86.0	191.0	63.0	ND	94.0	88.0	ND	130.0	120.0	70.0	60.0	96.1	
EFFLUENT (MG/L)	56.5	72.5	86.5	51.0	ND	25.0	41.1	45.7	46.2	76.1	47.0	84.8	57.5*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	206.79	265.35	383.19	242.76	ND	117.50	173.44	171.37	173.71	303.63	269.31	348.52	248.40	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	3.7	4.6	5.5	2.7	ND	4.5	3.7	ND	5.7	5.6	3.8	4.2	4.4	
EFFLUENT (MG/L)	2.5*	2.8*	3.1*	1.6*	ND	0.9	1.4*	1.5*	1.7*	2.6*	1.7*	3.1*	2.1	10
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	9.15	10.24	13.73	7.61	ND	4.23	5.90	5.62	6.39	10.37	9.74	12.74	9.07	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO
SS	25.0 MG/L	NO
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW
 FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
------------	----------	---------------------------

1992
 1992

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CASSELMAN
 PLANT : CASSELMAN LAGOON
 WORKS NUMBER : 110002201
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 :
 DESIGN CAPACITY : 1.36 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : PRESCOTT AND RUSSELL
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : S. NATION RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,021

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.69	0.69	0.84	0.87	0.83	0.83	0.70	0.74	0.69	0.73	1.04	0.76	0.78	
LAGOON DISCHARGE	ND	ND	ND	ND	120.00	ND	ND	ND	ND	ND	115.20	ND	117.60	
BOD5														
INFLUENT (MG/L)	105.0	218.0	180.0	86.0	62.0	50.0	125.0	175.0	56.0	220.0	146.0	238.0	138.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	3.0	ND	ND	ND	ND	ND	5.7	ND	4.4	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	2.49	ND	ND	ND	ND	ND	5.92	ND	3.43	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	67.0	356.0	120.0	63.0	72.0	46.0	93.0	200.0	32.0	118.0	189.0	189.0	128.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	6.8	ND	ND	ND	ND	ND	11.3	ND	9.1	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	5.64	ND	ND	ND	ND	ND	11.75	ND	7.10	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.3	14.2	6.7	4.7	4.4	4.3	6.3	8.1	5.1	13.6	7.1	8.9	7.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	0.3	ND	0.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	1.07	ND	ND	ND	ND	ND	0.31	ND	0.62	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

NO ACTION - MARGINAL FAILURE-MONITORING LEVEL OF FAILED PARAMETER CLOSELY

START DATE END DATE ANTICIPATED
 COMPLIANCE

1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CHALK RIVER
 PLANT : CHALK RIVER WPCP
 WORKS NUMBER : 110001587
 TREATMENT : EXTENDED AERATION
 : CONVERTIBLE OPERATING MODE
 :
 DESIGN CAPACITY : 0.54 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : RENFREW
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : DUCK CR TO DUCK LAKE
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 986

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.38	0.36	0.39	0.40	0.47	0.44	0.43	0.43	0.40	0.37	0.36	0.38	0.40	
BOD5														
INFLUENT (MG/L)	76.0	139.0	107.0	131.0	124.0	61.0	165.0	96.0	139.0	105.0	114.0	61.0	109.8	
EFFLUENT (MG/L)	11.5	22.6	21.7	11.4	11.8	11.5	16.0	9.3	7.9	5.8	5.5	4.0	11.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.37	8.13	8.46	4.56	5.54	5.06	6.88	3.99	3.16	2.14	1.98	1.52	4.64	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	139.0	149.0	130.0	137.0	115.0	173.0	172.0	123.0	136.0	122.0	136.0	146.0	139.8	
EFFLUENT (MG/L)	23.7	27.0	23.3	14.4	16.2	16.9	21.3	19.2	14.9	17.0	13.4	12.7	18.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.00	9.72	9.08	5.76	7.61	7.43	9.15	8.25	5.96	6.29	4.82	4.82	7.32	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.1	6.4	4.3	4.3	4.7	2.9	5.8	6.6	6.4	4.7	6.8	2.5	4.9	
EFFLUENT (MG/L)	2.7	4.3	2.9	1.6	1.6	1.7	1.6	1.8	2.4	2.5	2.1	2.0	2.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	1.02	1.54	1.13	0.64	0.75	0.74	0.68	0.77	0.96	0.92	0.75	0.76	0.92	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CHARLOTTENBURGH
 PLANT : PURCELL WPCP OP. NOV 89
 WORKS NUMBER : 110002684
 TREATMENT : EXTENDED AERATION
 : CONTACT STABILIZATION
 :
 DESIGN CAPACITY : 0.52 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : STORMONT, DUNDAS AND GLENGARRY
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : ST LAWRENCE
 MINOR BASIN : ST. LAWRENCE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 582

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.13	0.14	0.14	
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25.0	203.0	114.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	2.8	2.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31	0.39	0.36	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	153.0	323.0	238.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.4	22.0	18.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.00	3.08	2.62	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	4.7	3.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8	1.6	1.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.10	0.22	0.17	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	INSUFFICIENT DATA
SS	25.0 MG/L	INSUFFICIENT DATA
TP	NA	INSUFFICIENT DATA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CHESTERVILLE
 PLANT : CHESTERVILLE LAGOON
 WORKS NUMBER : 110000114
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 :
 DESIGN CAPACITY : 1.04 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : STORMONT, DUNDAS AND GLENGARRY
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : SOUTH NATION RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,460

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.54	0.51	0.71	0.91	0.96	0.81	0.61	0.57	0.51	0.61	1.13	0.60	0.71	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	97.56	ND	97.56	
BOD5														
INFLUENT (MG/L)	62.0	50.0	55.0	17.0	38.0	23.0	51.0	42.0	68.0	56.0	42.0	110.0	51.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	7.5	ND	ND	ND	ND	ND	8.0	ND	7.8	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	7.20	ND	ND	ND	ND	ND	9.04	ND	5.54	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	56.0	47.0	71.0	40.0	70.0	32.0	94.0	81.0	54.0	45.0	43.0	84.0	59.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	13.0	ND	ND	ND	ND	ND	39.5	ND	26.3	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	12.48	ND	ND	ND	ND	ND	44.63	ND	18.67	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.1	4.4	5.6	1.9	3.1	2.6	4.4	4.3	4.9	4.5	2.7	5.1	4.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	0.9	ND	1.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	2.68	ND	ND	ND	ND	ND	1.01	ND	1.35	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

START DATE END DATE ANTICIPATED
 COMPLIANCE

OPERATIONAL/PROCESS - SAMPLING PROGRAM BEING MODIFIED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COBDEN
 PLANT : COBDEN WPCP
 WORKS NUMBER : 120000596
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.68 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : RENFREW
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : MUSKRAT RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,035

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.54	0.47	0.76	0.86	0.95	0.72	0.54	0.51	0.65	0.71	0.88	0.58	0.68	
BOD5														
INFLUENT (MG/L)	46.0	88.0	86.0	38.0	24.0	48.0	82.0	54.0	52.0	14.0	20.0	50.0	50.2	
EFFLUENT (MG/L)	7.0	2.0	6.0	2.0	6.0	6.0	2.0	2.0	2.0	2.0	2.0	2.0	3.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.78	0.94	4.56	1.72	5.70	4.32	1.08	1.02	1.30	1.42	1.76	1.16	2.31	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	91.0	73.0	126.0	34.0	73.0	77.0	111.0	79.0	79.0	64.0	68.0	85.0	80.0	
EFFLUENT (MG/L)	7.3	4.8	16.0	6.2	4.4	5.3	4.9	5.5	7.2	7.0	5.4	7.8	6.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.94	2.25	12.16	5.33	4.18	3.81	2.64	2.80	4.68	4.97	4.75	4.52	4.62	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.7	4.6	4.5	3.7	3.4	3.4	4.1	4.9	4.0	3.4	3.0	3.7	4.0	
EFFLUENT (MG/L)	0.5	0.9	0.8	0.7	0.7	0.7	0.8	0.6	0.7	0.6	0.7	0.8	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.27	0.42	0.60	0.60	0.66	0.50	0.43	0.30	0.45	0.42	0.61	0.46	0.48	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : CORNWALL
 PLANT : CORNWALL WPCP
 WORKS NUMBER : 110000132
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 54.55 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : STORMONT, DUNDAS AND GLENGARRY
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : ST. LAWRENCE RIVER
 MINOR BASIN : ST. LAWRENCE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 46,800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	39.98	37.27	52.48	59.36	54.29	58.54	53.76	55.00	47.00	47.00	55.77	32.73	49.43	
BOD5														
INFLUENT (MG/L)	70.0	68.0	98.0	58.0	91.0	54.0	39.0	32.0	56.0	78.0	61.0	68.0	64.4	
EFFLUENT (MG/L)	40.0	32.0	52.4	24.0	38.0	24.0	18.0	9.0	27.0	36.0	20.5	24.0	28.7	
CONCENTRATION LIMIT (MG/L)													90.0	
LOADING (KG/D)	1599.20	1192.64	2749.95	1424.64	2063.02	1404.96	967.68	495.00	1269.00	1692.00	1143.28	785.52	1418.64	
LOADING LIMIT (KG/D)														
SUSPENDED SOLIDS														
INFLUENT (MG/L)	113.0	130.0	105.0	110.0	130.0	97.0	99.0	106.0	116.0	143.0	108.0	92.0	112.4	
EFFLUENT (MG/L)	21.0	19.0	23.0	18.0	19.0	16.0	16.0	13.0	16.0	15.0	15.4	18.0	17.5	
CONCENTRATION LIMIT (MG/L)													60.0	
LOADING (KG/D)	839.58	708.13	1207.04	1068.48	1031.51	936.64	860.16	715.00	752.00	705.00	858.85	589.14	865.03	
LOADING LIMIT (KG/D)														
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.7	2.8	2.8	2.5	3.5	3.0	2.9	3.1	3.7	3.5	2.9	3.3	3.1	
EFFLUENT (MG/L)	0.9	0.9	0.9	0.9	ND	0.7	0.8	0.8	0.9	0.8	0.7	1.0	0.8	
CONCENTRATION LIMIT (MG/L)													1.0	
LOADING (KG/D)	35.98	33.54	47.23	53.42	ND	40.97	43.00	44.00	42.30	37.60	39.03	32.73	39.54	
LOADING LIMIT (KG/D)														

SUMMARY

PARAM	CRITERIA	LOADING	COMPLIES WITH CONC	LOADING
BOD	90.0 MG/L	NA	YES	NA
SS	60.0 MG/L	NA	YES	NA
TP	1.0 MG/L	NA	YES	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CORNWALL
 PLANT : CORNWALL WPCP
 WORKS NUMBER : 110000132
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 54.55 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : STORMONT, DUNDAS AND GLENGARRY
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : ST. LAWRENCE RIVER
 MINOR BASIN : ST. LAWRENCE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 46,800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	39.98	37.27	52.48	59.36	54.29	58.54	53.76	55.00	47.00	47.00	55.77	32.73	49.43	
BOD5														
INFLUENT (MG/L)	70.0	68.0	98.0	58.0	91.0	54.0	39.0	32.0	56.0	78.0	61.0	68.0	64.4	
EFFLUENT (MG/L)	40.0	32.0	52.4	24.0	38.0	24.0	18.0	9.0	27.0	36.0	20.5	24.0	28.7	
LOADING (KG/D)	1599.20	1192.64	2749.95	1424.64	2063.02	1404.96	967.68	495.00	1269.00	1692.00	1143.28	785.52	1418.64	
PERCENT REMOVAL	43	53	47	59	58	56	54	72	52	54	66	65	55	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	113.0	130.0	105.0	110.0	130.0	97.0	99.0	106.0	116.0	143.0	108.0	92.0	112.4	
EFFLUENT (MG/L)	21.0	19.0	23.0	18.0	19.0	16.0	16.0	13.0	16.0	15.0	15.4	18.0	17.5	
LOADING (KG/D)	839.58	708.13	1207.04	1068.48	1031.51	936.64	860.16	715.00	752.00	705.00	858.85	589.14	865.03	
PERCENT REMOVAL	81	85	78	84	85	84	84	88	86	90	86	80	84	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.7	2.8	2.8	2.5	3.5	3.0	2.9	3.1	3.7	3.5	2.9	3.3	3.1	
EFFLUENT (MG/L)	0.9	0.9	0.9	0.9	ND	0.7	0.8	0.8	0.9	0.8	0.7	1.0	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	35.98	33.54	47.23	53.42	ND	40.97	43.00	44.00	42.30	37.60	39.03	32.73	39.54	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CORNWALL
 PLANT : LONG SAULT WPCP
 WORKS NUMBER : 120000131
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 :
 :
 :
 DESIGN CAPACITY : 1.36 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : STORMONT, DUNDAS AND GLENGARRY
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : ST. LAWRENCE RIVER
 MINOR BASIN : ST. LAWRENCE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,300

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.75	0.75	0.90	1.25	1.51	1.43	1.12	1.45	1.04	1.69	2.26	1.37	1.29	
BOD5														
INFLUENT (MG/L)	ND	16.0	102.0	ND	16.0	ND	18.0	14.0	20.0	40.0	49.0	150.0	47.2	
EFFLUENT (MG/L)	ND	14.0	2.0	ND	16.0	2.0	2.0	4.0	4.0	4.0	15.0	4.0	6.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	10.50	1.80	ND	24.16	2.86	2.24	5.80	4.16	6.76	33.90	5.48	8.64	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	13.0	149.0	ND	26.0	ND	19.0	12.0	27.0	27.0	27.0	136.0	48.4	
EFFLUENT (MG/L)	ND	14.0	11.0	ND	21.0	6.0	4.0	3.0	6.0	11.6	38.0	6.0	12.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	10.50	9.90	ND	31.71	8.58	4.48	4.35	6.24	19.60	85.88	8.22	15.61	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	1.3	6.4	ND	2.1	ND	3.4	2.7	3.3	2.0	1.6	6.2	3.2	
EFFLUENT (MG/L)	ND	3.5	4.1	ND	2.9	2.5	3.7	3.7	4.7	2.7	1.5	2.8	3.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	2.62	3.69	ND	4.37	3.57	4.14	5.36	4.88	4.56	3.39	3.83	4.13	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

START DATE END DATE ANTICIPATED
 COMPLIANCE

INFLUENT SEWAGE - INSTALLING INDUSTRIAL PRETREATMENT

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DEEP RIVER
 PLANT : DEEP RIVER WPCP
 WORKS NUMBER : 120000612
 TREATMENT : PRIMARY
 :
 :
 :
 DESIGN CAPACITY : 2.18 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : RENFREW
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : OTTAWA RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,230

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.31	1.68	1.92	2.09	1.64	1.71	1.71	1.62	1.46	1.53	1.65	1.42	1.73	
BOD5														
INFLUENT (MG/L)	155.0	110.0	84.0	230.0	110.0	80.0	64.0	130.0	86.0	80.0	98.0	135.0	113.5	
EFFLUENT (MG/L)	60.0	96.0	66.0	96.0	44.0	36.0	49.0	52.0	60.0	56.0	50.0	48.0	59.4	
LOADING (KG/D)	138.60	161.28	126.72	200.64	72.16	61.56	83.79	84.24	87.60	85.68	82.50	68.16	102.76	
PERCENT REMOVAL	61	13	21	58	60	55	23	60	30	30	49	64	48	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	115.0	128.0	98.0	160.0	124.0	80.0	114.0	150.0	76.0	67.0	103.0	100.0	109.6	
EFFLUENT (MG/L)	48.0	94.0	65.0	154.0	50.0	37.0	73.0	66.0	34.0	69.6	42.0	28.0	63.4	
LOADING (KG/D)	110.88	157.92	124.80	321.86	82.00	63.27	124.83	106.92	49.64	106.48	69.30	39.76	109.68	
PERCENT REMOVAL	58	27	34	04	60	54	36	56	55	ND	59	72	42*	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	60.9	10.0	5.3	6.9	9.3	7.0	8.7	8.6	5.5	5.0	5.6	10.8	12.0	
EFFLUENT (MG/L)	5.0	0.9	5.8	5.1	4.5	3.8	4.1	5.4	4.9	5.0	5.0	3.9	4.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	11.55	1.51	11.13	10.65	7.38	6.49	7.01	8.74	7.15	7.65	8.25	5.53	7.79	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30%	YES
SS	50%	NO
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

START DATE END DATE ANTICIPATED
 COMPLIANCE

NO ACTION - MARGINAL FAILURE-MONITORING LEVEL OF FAILED PARAMETER CLOSELY

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DELORO
 PLANT : DELORO WPCP
 WORKS NUMBER : 120000970
 TREATMENT : COMMUNAL SEPTIC TANK
 :
 :
 :
 DESIGN CAPACITY : 1.74 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : HASTINGS
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MOIRA RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 157

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	101.0	91.0	94.0	45.0	29.0	34.0	110.0	144.0	120.0	232.0	41.0	36.0	89.8	
EFFLUENT (MG/L)	1.8	3.0	2.0	2.0	1.4	2.7	1.8	2.0	1.7	1.5	1.4	1.7	1.9	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
PERCENT REMOVAL	98	97	98	96	95	92	98	99	99	99	97	95	98	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	169.0	115.0	215.0	78.0	53.0	36.0	176.0	118.0	120.0	171.0	50.0	67.0	114.0	
EFFLUENT (MG/L)	2.8	3.5	3.8	2.8	3.0	3.0	3.8	4.4	5.1	3.0	3.2	4.0	3.5	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
PERCENT REMOVAL	98	97	98	96	94	92	98	96	96	98	94	94	97	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.1	3.5	4.4	2.1	1.2	2.1	4.0	5.2	4.9	5.4	2.2	1.5	3.4	
EFFLUENT (MG/L)	1.9	1.8	1.8	1.2	1.2	1.2	1.4	1.6	1.7	1.7	1.3	1.3	1.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30%	YES
SS	50%	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DESERONTO
 PLANT : DESERONTO WPCP
 WORKS NUMBER : 110000980
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.36 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : HASTINGS
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BAY OF QUINTE
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,732

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.15	1.04	1.37	1.56	1.46	1.30	1.41	1.05	1.20	1.30	1.78	1.33	1.33	
BOD5														
INFLUENT (MG/L)	79.0	100.0	65.0	77.0	74.0	62.0	95.0	ND	71.0	ND	51.0	118.0	79.2	
EFFLUENT (MG/L)	5.8	3.5	7.5	2.5	6.8	1.8	3.3	2.2	2.6	3.3	4.0	9.0	4.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.67	3.64	10.27	3.90	9.92	2.34	4.65	2.31	3.12	4.29	7.12	11.97	5.85	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	79.0	105.0	106.0	102.0	101.0	124.0	142.0	ND	122.0	ND	77.0	115.0	107.3	
EFFLUENT (MG/L)	15.0	11.0	13.5	5.3	14.6	7.1	8.2	3.6	7.6	11.5	19.6	17.3	11.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	17.25	11.44	18.49	8.26	21.31	9.23	11.56	3.78	9.12	14.95	34.88	23.00	14.90	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.4	4.8	3.6	4.1	3.7	4.0	5.9	ND	4.4	ND	4.0	5.7	4.5	
EFFLUENT (MG/L)	0.7	0.5	0.7	0.4	0.6	0.3	0.4	0.5	0.5	0.4	0.8	0.6	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.80	0.52	0.95	0.62	0.87	0.39	0.56	0.52	0.60	0.52	1.42	0.79	0.67	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : EAST HAWKESBURY
 PLANT : CHUTE A BLONDEAU WPCP IN OP. 1987
 WORKS NUMBER : 110003399
 TREATMENT : EXTENDED AERATION
 :
 :
 DESIGN CAPACITY : 0.10 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : PRESCOTT AND RUSSELL
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : OTTAWA RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 165

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.03	0.03	0.06	0.07	0.08	0.11	0.06	0.04	0.03	0.04	0.07	0.05	0.06	
BOD5														
INFLUENT (MG/L)	ND	660.0	265.0	150.0	88.0	92.0	101.0	88.0	129.0	174.0	131.0	104.0	180.2	
EFFLUENT (MG/L)	ND	2.0	5.0	2.0	4.2	11.8	5.0	4.0	3.3	3.8	2.3	4.9	4.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	0.06	0.30	0.14	0.33	1.29	0.30	0.16	0.09	0.15	0.16	0.24	0.26	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	214.0	244.0	186.0	112.0	211.0	143.0	109.0	97.0	155.0	162.0	83.0	67.0	148.6	
EFFLUENT (MG/L)	21.0	25.8	21.0	13.9	12.6	18.5	12.3	10.0	11.6	13.0	13.1	5.2	14.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.63	0.77	1.26	0.97	1.00	2.03	0.73	0.40	0.34	0.52	0.91	0.26	0.89	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.2	18.9	11.1	9.6	9.3	6.5	15.7	7.4	5.1	8.0	3.1	7.3	9.2	
EFFLUENT (MG/L)	6.8	8.6	9.2	2.2	2.0	5.0	4.7	4.4	5.1	5.7	3.4	3.3	5.0	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.20	0.25	0.55	0.15	0.16	0.55	0.28	0.17	0.15	0.22	0.23	0.16	0.30	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : EGANVILLE
 PLANT : EGANVILLE WPCP
 WORKS NUMBER : 110000141
 TREATMENT : EXTENDED AERATION
 :
 :
 DESIGN CAPACITY : 0.76 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : RENFREW
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BONNECHERE RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,219

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.48	0.47	0.54	0.55	0.67	0.61	0.54	0.46	0.48	0.50	0.52	0.48	0.53	
BOD5														
INFLUENT (MG/L)	183.0	144.0	145.0	141.0	100.0	107.0	117.0	80.0	116.0	156.0	171.0	220.0	140.0	
EFFLUENT (MG/L)	5.0	5.5	4.3	5.0	3.0	2.5	2.0	3.0	3.5	2.8	3.5	3.3	3.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.40	2.58	2.32	2.75	2.01	1.52	1.08	1.38	1.68	1.40	1.82	1.58	1.91	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	163.0	114.0	137.0	147.0	115.0	137.0	107.0	80.0	96.0	137.0	176.0	98.0	125.6	
EFFLUENT (MG/L)	8.0	9.7	16.0	11.0	12.6	16.7	8.0	11.2	10.9	7.3	16.0	14.0	11.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.84	4.55	8.64	6.05	8.44	10.18	4.32	5.15	5.23	3.65	8.32	6.72	6.25	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.2	6.1	5.6	5.4	4.8	5.8	4.8	4.7	5.1	4.4	3.6	4.0	5.0	
EFFLUENT (MG/L)	0.7	0.5	0.9	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.4	0.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.33	0.23	0.48	0.27	0.40	0.36	0.32	0.27	0.28	0.25	0.20	0.19	0.32	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ERNESTOWN
 PLANT : AMHERSTVIEW LAGOON
 WORKS NUMBER : 110000196
 TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
 :
 :
 :
 DESIGN CAPACITY : 2.39 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : LENNOX & ADDINGTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : COLLINS CR. N.CHANNEL
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 6,900

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.16	2.06	2.65	2.86	2.50	2.38	1.76	1.90	1.97	2.30	3.37	2.45	2.36	
LAGOON DISCHARGE	66.95	57.71	82.13	85.81	77.45	71.42	54.57	58.97	59.18	71.33	101.13	76.08	71.89	
BOD5														
INFLUENT (MG/L)	134.0	89.0	145.0	84.0	85.0	73.0	93.0	98.0	88.0	99.0	61.0	113.0	96.8	
EFFLUENT (MG/L)	25.5	31.8	23.7	29.8	33.3	41.0	33.5	35.2	30.2	26.0	29.5	26.0	30.5*	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	55.08	65.50	62.80	85.22	83.25	97.58	58.96	66.88	59.49	59.80	99.41	63.70	71.98	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	168.0	81.0	287.0	65.0	87.0	71.0	90.0	82.0	63.0	101.0	62.0	74.0	102.6	
EFFLUENT (MG/L)	52.3	49.8	37.3	59.5	55.4	70.8	83.2	118.2	81.0	65.8	53.8	48.3	64.6*	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	112.96	102.58	98.84	170.17	138.50	168.50	146.43	224.58	159.57	151.34	181.30	118.33	152.46	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.8	4.9	4.7	4.1	4.9	4.7	6.2	8.2	5.5	5.2	4.0	6.3	5.4	
EFFLUENT (MG/L)	6.3	6.6	6.1	4.9	0.1	4.6	3.0	3.0	2.9	3.8	3.6	4.2	4.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	13.60	13.59	16.16	14.01	0.25	10.94	5.28	5.70	5.71	8.74	12.13	10.29	9.68	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	NO
SS	40.0 MG/L	NO
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - PUMPING STATION MODIFICATION

START DATE END DATE ANTICIPATED
 COMPLIANCE

1990/03

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ERNESTOWN
 PLANT : ODESSA WPCP
 WORKS NUMBER : 110002041
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.90 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : LENNOX & ADDINGTON
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MILLHAVEN CREEK
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 973

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.05	0.94	1.68	1.88	1.42	1.26	0.92	0.85	0.88	0.95	2.33	0.86	1.25	
BOD5														
INFLUENT (MG/L)	45.0	50.0	64.0	24.0	33.0	23.0	35.0	40.0	41.0	46.0	18.0	51.0	39.2	
EFFLUENT (MG/L)	4.2	11.5	11.3	6.8	4.0	2.3	2.0	2.0	1.8	2.0	2.2	4.7	4.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.41	10.81	18.98	12.78	5.68	2.89	1.84	1.70	1.58	1.90	5.12	4.04	5.75	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	46.0	48.0	86.0	41.0	44.0	35.0	54.0	50.0	38.0	72.0	41.0	52.0	50.6	
EFFLUENT (MG/L)	31.4	43.8	40.8	47.0	26.4	11.0	7.3	7.4	11.0	12.6	17.4	22.0	23.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	32.97	41.17	68.54	88.36	37.48	13.86	6.71	6.29	9.68	11.97	40.54	18.92	29.00	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.5	2.9	4.2	1.7	2.0	2.3	2.8	3.0	3.2	2.8	1.5	3.0	2.7	
EFFLUENT (MG/L)	1.3*	1.5*	1.6*	1.6*	0.9	0.4	0.4	0.4	0.6	0.4	0.7	0.6	0.9	4
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	1.36	1.41	2.68	3.00	1.27	0.50	0.36	0.34	0.52	0.38	1.63	0.51	1.13	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

START DATE END DATE ANTICIPATED
 COMPLIANCE

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW

1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : FRANKFORD
 PLANT : FRANKFORD WPCP
 WORKS NUMBER : 110000267
 TREATMENT : CONTACT STABILIZATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.36 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : HASTINGS
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : TRENT RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,190

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.07	0.93	0.97	1.35	1.28	0.89	0.62	0.64	7.94	0.85	1.45	1.05	1.59	
BOD5														
INFLUENT (MG/L)	255.0	153.0	137.0	70.0	145.0	168.0	200.0	255.0	86.0	191.0	207.0	146.0	167.8	
EFFLUENT (MG/L)	15.8	14.3	8.5	12.3	16.4	13.0	11.0	19.9	8.3	8.2	10.0	11.0	12.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	16.90	13.29	8.24	16.60	20.99	11.57	6.82	12.73	65.90	6.97	14.50	11.55	19.72	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	81.0	112.0	135.0	63.0	113.0	120.0	121.0	153.0	126.0	185.0	98.0	104.0	117.6	
EFFLUENT (MG/L)	16.9	16.7	22.8	19.5	25.1	17.9	15.0	16.9	6.2	7.1	10.6	17.3	16.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	18.08	15.53	22.11	26.32	32.12	15.93	9.30	10.81	49.22	6.03	15.37	18.16	25.44	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.0	5.9	6.3	4.5	5.5	5.4	5.0	4.8	5.4	4.7	4.6	4.9	5.3	
EFFLUENT (MG/L)	0.6	0.4	0.3	0.5	0.4	0.6	0.7	0.6	0.3	0.4	0.5	0.6	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.64	0.37	0.29	0.67	0.51	0.53	0.43	0.38	2.38	0.34	0.72	0.63	0.80	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GANANOQUE
 PLANT : GANANOQUE LAGOON
 WORKS NUMBER : 110000285
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 :
 DESIGN CAPACITY : 3.27 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : LEEDS AND GRENVILLE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : STOCKING CR GANANOQUE R
 MINOR BASIN : ST. LAWRENCE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.21	4.80	5.39	5.44	5.22	4.71	3.82	4.25	3.80	3.95	5.27	3.51	4.61	
LAGOON DISCHARGE	161.40	135.10	167.10	319.31	290.78	ND	ND	46.71	114.03	122.36	158.22	108.78	162.38	
BOD5														
INFLUENT (MG/L)	64.0	49.0	100.0	40.0	52.0	52.0	73.0	98.0	87.0	114.0	53.0	57.0	69.9	
EFFLUENT (MG/L)	8.5	9.5	17.0	19.3	17.8	ND	ND	7.0	3.5	4.5	3.5	2.5	9.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	44.28	45.60	91.63	104.99	92.91	ND	ND	29.75	13.30	17.77	18.44	8.77	42.87	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	92.0	126.0	233.0	69.0	97.0	88.0	82.0	111.0	133.0	259.0	83.0	113.0	123.8	
EFFLUENT (MG/L)	31.5	24.5	36.0	22.7	40.1	ND	ND	11.0	3.1	6.3	8.8	4.5	18.9	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	164.11	117.60	194.04	123.48	209.32	ND	ND	46.75	11.78	24.88	46.37	15.79	87.13	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.5	4.2	4.7	2.5	2.4	3.7	4.3	5.5	3.8	6.2	3.5	3.8	4.0	
EFFLUENT (MG/L)	2.3	2.6	2.7	2.0	2.5	ND	ND	2.0	2.7	3.5	3.1	2.5	2.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	11.98	12.48	14.55	10.88	13.05	ND	ND	8.50	10.26	13.82	16.33	8.77	11.99	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988	1991	1991
1988	1991	1991
1989	1995	1995
1989	1995	1995

COLLECTION SYSTEM - INFILTRATION PROBLEMS BEING CORRECTED
 COLLECTION SYSTEM - ILLEGAL CONNECTIONS BEING ELIMINATED
 FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING EVALUATED
 FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : GLOUCESTER
 PLANT : GREEN CREEK WPCP
 WORKS NUMBER : 120000729
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 363.68 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : OTTAWA-CARLETON, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : OTTAWA RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 450,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	422.90	410.90	489.60	514.10	520.80	485.10	450.90	448.20	434.50	427.30	471.50	450.00	460.48	
BOD5														
INFLUENT (MG/L)	116.0	121.0	98.0	100.0	90.0	116.4	96.0	76.0	109.0	122.0	98.0	120.0	105.2	
EFFLUENT (MG/L)	59.1	54.6	53.2	43.3	34.2	30.3	24.8	29.5	33.9	38.1	29.9	53.3	40.4*	
CONCENTRATION LIMIT (MG/L)													39.0	
LOADING (KG/D)	4993.39	2435.14	6046.72	2260.53	7811.36	4698.53	1182.32	3221.90	4729.55	6280.13	4097.85	3985.00	18603.39*	
LOADING LIMIT (KG/D)													217.20	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	144.0	148.0	141.0	151.0	127.0	142.2	148.0	108.0	137.0	140.0	150.0	167.0	141.9	
EFFLUENT (MG/L)	49.5	55.4	61.0	51.4	50.8	41.6	42.9	37.5	52.6	39.4	47.7	60.7	49.2*	
CONCENTRATION LIMIT (MG/L)													31.0	
LOADING (KG/D)	933.55	2763.86	9865.60	6424.74	6456.64	180.16	9343.61	6807.50	2854.70	6835.62	2490.55	7315.00	22655.62*	
LOADING LIMIT (KG/D)													169.00	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.1	3.9	3.6	3.3	3.3	3.7	4.0	3.5	4.9	4.5	3.8	4.1	3.9	
EFFLUENT (MG/L)	2.7*	2.2*	2.2*	2.0*	1.7*	1.4*	1.4*	1.4*	2.1*	1.8*	1.5*	2.4*	1.9	12
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1141.83	903.98	1077.12	1028.20	885.36	679.14	631.26	627.48	912.45	769.14	707.25	1080.00	874.91*	
LOADING LIMIT (KG/D)													5.45	

SUMMARY

PARAM	CRITERIA	LOADING	CONC	LOADING	COMPLIES WITH
BOD	39.0 MG/L	212.70 KG/D	NO	NO	
SS	31.0 MG/L	169.00 KG/D	NO	NO	
TP	1.0 MG/L	5.45 KG/D	NO	NO	

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988	1990/03	1991

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GLOUCESTER
 PLANT : GREEN CREEK WPCP
 WORKS NUMBER : 120000729
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 363.68 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : OTTAWA-CARLETON, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : OTTAWA RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 450,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	422.90	410.90	489.60	514.10	520.80	485.10	450.90	448.20	434.50	427.30	471.50	450.00	460.48	
BOD5														
INFLUENT (MG/L)	116.0	121.0	98.0	100.0	90.0	116.4	96.0	76.0	109.0	122.0	98.0	120.0	105.2	
EFFLUENT (MG/L)	59.1	54.6	53.2	43.3	34.2	30.3	24.8	29.5	33.9	38.1	29.9	53.3	40.4*	
LOADING (KG/D)	4993.39	2435.14	6046.72	2260.53	7811.36	4698.53	1182.32	3221.90	4729.55	6280.13	4097.85	3985.00	18603.39*	
PERCENT REMOVAL	49	55	46	57	62	74	74	61	69	69	69	56	62	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	144.0	148.0	141.0	151.0	127.0	142.2	148.0	108.0	137.0	140.0	150.0	167.0	141.9	
EFFLUENT (MG/L)	49.5	55.4	61.0	51.4	50.8	41.6	42.9	37.5	52.6	39.4	47.7	60.7	49.2*	
LOADING (KG/D)	933.55	2763.86	9865.60	6424.74	6456.64	180.16	9343.61	6807.50	2854.70	6835.62	2490.55	7315.00	22655.62*	
PERCENT REMOVAL	66	63	57	66	60	71	71	65	62	72	68	64	65*	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.1	3.9	3.6	3.3	3.3	3.7	4.0	3.5	4.9	4.5	3.8	4.1	3.9	
EFFLUENT (MG/L)	2.7*	2.2*	2.2*	2.0*	1.7*	1.4*	1.4*	1.4*	2.1*	1.8*	1.5*	2.4*	1.9	12
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1141.83	903.98	1077.12	1028.20	885.36	679.14	631.26	627.48	912.45	769.14	707.25	1080.00	874.91*	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	NO
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988	1990/03	1991

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GOULBOURN
 PLANT : MUNSTER LAGOON
 WORKS NUMBER : 120001522
 TREATMENT : LAGOON AND SPRAY
 : SEASONAL DISCHARGE
 :
 DESIGN CAPACITY : 0.36 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : OTTAWA-CARLETON, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : NO DISC.TO SURFACE WATER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,300

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	32.0	ND	ND	ND	ND	ND	ND	ND	ND	32.0	
EFFLUENT (MG/L)	ND	ND	ND	36.5	ND	ND	ND	ND	ND	ND	ND	ND	36.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	43.0	ND	ND	ND	ND	ND	ND	ND	ND	43.0	
EFFLUENT (MG/L)	ND	ND	ND	50.0	ND	ND	ND	ND	ND	ND	ND	ND	50.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	3.2	
EFFLUENT (MG/L)	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	2.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	NO DIRECT DISCHARGE
SS	40.0 MG/L	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HAGARTY & RICHARDS
 PLANT : KILLALOE STN.WPCP
 WORKS NUMBER : 110001532
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.51 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : RENFREW
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BRUDENELL CREEK
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 670

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.17	0.14	0.19	0.40	0.28	0.32	0.19	0.19	0.17	0.21	0.27	0.22	0.23	
BOD5														
INFLUENT (MG/L)	218.0	218.0	203.0	153.0	130.0	49.0	73.0	73.0	200.0	ND	119.0	300.0	157.8	
EFFLUENT (MG/L)	3.0	13.5	2.0	2.0	2.0	1.0	3.0	3.0	2.1	3.0	1.5	2.0	3.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.51	1.89	0.38	0.80	0.56	0.32	0.57	0.57	0.35	0.63	0.40	0.44	0.74	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	223.0	291.0	267.0	212.0	193.0	143.0	164.0	164.0	249.0	ND	138.0	242.0	207.8	
EFFLUENT (MG/L)	8.2	7.8	7.0	8.2	7.2	8.0	7.5	7.5	7.9	9.4	7.8	6.3	7.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.39	1.09	1.33	3.28	2.01	2.56	1.42	1.42	1.34	1.97	2.10	1.38	1.77	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.6	7.5	8.1	7.1	6.1	4.7	6.1	6.1	7.4	ND	6.7	6.1	6.7	
EFFLUENT (MG/L)	1.0	1.0	0.9	0.6	0.6	0.5	0.7	0.7	0.8	0.6	0.8	0.6	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.17	0.14	0.17	0.24	0.16	0.16	0.13	0.13	0.13	0.12	0.21	0.13	0.16	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HAWKESBURY
 PLANT : HAWKESBURY WPCP
 WORKS NUMBER : 110002283
 TREATMENT : MODIFIED ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 12.27 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : PRESCOTT AND RUSSELL
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : OTTAWA RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 9,680

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	6.38	6.07	8.14	9.95	8.46	9.24	7.51	8.00	7.01	7.63	11.26	5.35	7.92	
BOD5														
INFLUENT (MG/L)	ND	34.0	44.0	42.0	55.0	98.0	62.0	56.0	56.0	94.0	80.0	58.0	61.7	
EFFLUENT (MG/L)	ND	12.0	12.0	2.0	11.0	11.4	6.5	5.2	11.0	5.8	2.9	7.1	7.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	72.84	97.68	19.90	93.06	105.33	48.81	41.60	77.11	44.25	32.65	37.98	62.57	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	99.0	76.0	128.0	81.0	126.0	160.0	198.0	92.0	134.0	97.0	83.0	85.0	113.3	
EFFLUENT (MG/L)	15.0	25.8	50.8	19.3	15.0	11.1	19.0	20.8	14.1	14.2	17.3	9.7	19.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	95.70	156.60	413.51	192.03	126.90	102.56	142.69	166.40	98.84	108.34	194.79	51.89	152.86	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.8	3.2	3.1	2.7	3.0	4.2	3.4	3.3	3.9	3.8	2.7	3.4	3.5	
EFFLUENT (MG/L)	0.9	0.7	1.0	0.3	0.4	0.7	0.7	0.8	0.9	0.6	0.8	0.7	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	5.74	4.24	8.14	2.98	3.38	6.46	5.25	6.40	6.30	4.57	9.00	3.74	5.54	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : IROQUOIS
 PLANT : IROQUOIS WPCP
 WORKS NUMBER : 120000159
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 5.00 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : STORMONT, DUNDAS AND GLENGARRY
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : ST. LAWRENCE RIVER
 MINOR BASIN : ST. LAWRENCE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,212

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.65	2.02	3.47	4.91	2.55	2.82	3.04	2.97	3.01	2.99	3.09	3.40	3.08	
BOD5														
INFLUENT (MG/L)	28.0	ND	40.0	24.0	36.0	32.0	ND	18.0	30.0	46.0	ND	68.0	35.8	
EFFLUENT (MG/L)	ND	ND	9.0	3.0	15.0	8.0	ND	5.0	19.0	19.0	ND	4.0	10.3	
LOADING (KG/D)	ND	ND	31.23	14.73	38.25	22.56	ND	14.85	57.19	56.81	ND	13.60	31.72	
PERCENT REMOVAL			78	88	58	75		72	37	59		94	71	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	136.0	ND	99.0	53.0	57.0	54.0	ND	33.0	70.0	70.0	ND	113.0	76.1	
EFFLUENT (MG/L)	ND	ND	36.0	12.0	47.6	4.8	ND	42.0	30.0	30.0	ND	8.0	26.3	
LOADING (KG/D)	ND	ND	124.92	58.92	121.38	13.53	ND	124.74	90.30	89.70	ND	27.20	81.00	
PERCENT REMOVAL			64	77	16	91		ND	57	57		93	65	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.7	ND	3.6	1.7	1.9	2.1	ND	1.8	2.5	2.5	ND	3.3	2.6	
EFFLUENT (MG/L)	ND	ND	0.6	0.1	0.2	0.3	ND	0.3	0.3	0.3	ND	0.1	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	2.08	0.49	0.51	0.84	ND	0.89	0.90	0.89	ND	0.34	0.92	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	50%	INSUFFICIENT DATA
SS	70%	INSUFFICIENT DATA
TP	1.0 MG/L	INSUFFICIENT DATA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KEMPTVILLE
 PLANT : KEMPTVILLE WPCP (TERTIARY PROPOSED)
 WORKS NUMBER : 120000113
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 2.27 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : LEEDS AND GRENVILLE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : KEMPTVILLE CREEK
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,400

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.86	1.61	1.78	2.65	3.17	2.35	1.83	1.84	1.68	2.03	2.86	2.62	2.19	
<u>BOD5</u>														
INFLUENT (MG/L)	60.0	78.0	110.0	40.0	42.0	36.0	36.0	104.0	70.0	46.0	64.0	40.0	60.5	
EFFLUENT (MG/L)	13.0	33.0	35.0	13.0	6.0	14.0	12.0	12.0	28.0	11.0	14.0	15.0	17.2	
LOADING (KG/D)	24.18	53.13	62.30	34.45	19.02	32.90	21.96	22.08	47.04	22.33	40.04	39.30	37.67	
PERCENT REMOVAL	78	58	68	68	86	61	67	88	60	76	78	63	72	
PERCENT REMOVAL LIMITS													50	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	45.0	67.0	140.0	39.0	66.0	44.0	32.0	142.0	68.0	119.0	58.0	80.0	75.0	
EFFLUENT (MG/L)	18.0	18.0	22.0	16.0	15.0	14.0	15.0	8.0	19.0	18.0	15.0	35.0	17.8	
LOADING (KG/D)	33.48	28.98	39.16	42.40	47.55	32.90	27.45	14.72	31.92	36.54	42.90	91.70	38.98	
PERCENT REMOVAL	60	73	84	59	77	68	53	94	72	85	74	56	76	
PERCENT REMOVAL LIMITS													70	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	3.4	5.0	5.2	3.2	2.5	4.9	3.5	5.6	5.2	5.6	6.4	3.8	4.5	
EFFLUENT (MG/L)	1.7*	1.9*	2.7*	1.3*	1.1*	1.4*	1.4*	1.3*	2.7*	2.4*	1.9*	1.8*	1.8	12
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	3.16	3.05	4.80	3.44	3.48	3.29	2.56	2.39	4.53	4.87	5.43	4.71	3.94	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - SAMPLING PROGRAM BEING MODIFIED
 OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED
 FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989	1990/04	1995
1989	1990/01	1995
1989	1994	1995

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KINGSTON
 PLANT : KINGSTON WPCP
 WORKS NUMBER : 120001050
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 61.37 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : FRONTENAC
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : ST. LAWRENCE RIVER
 MINOR BASIN : ST. LAWRENCE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 67,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	54.33	52.51	63.45	67.99	60.76	66.90	52.76	53.61	52.34	57.57	75.09	50.64	59.00	
BOD5														
INFLUENT (MG/L)	101.0	94.0	113.0	68.0	68.0	81.0	67.0	66.0	88.0	94.0	64.0	79.0	81.9	
EFFLUENT (MG/L)	22.0	40.0	33.0	20.0	18.0	23.0	21.0	22.0	26.0	23.0	21.0	33.0	25.2	
LOADING (KG/D)	1195.26	2100.40	2093.85	1359.80	1093.68	1538.70	1107.96	1179.42	1360.84	1324.11	1576.89	1671.12	1486.80	
PERCENT REMOVAL	78	57	71	71	74	72	69	67	70	76	67	58	69	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	91.0	74.0	125.0	88.0	75.0	72.0	68.0	75.0	93.0	85.0	67.0	78.0	82.6	
EFFLUENT (MG/L)	17.0	28.0	24.0	20.0	21.0	19.0	13.0	15.0	20.0	20.0	19.0	18.0	19.5	
LOADING (KG/D)	923.61	1470.28	1522.80	1359.80	1275.96	1271.10	685.88	804.15	1046.80	1151.40	1426.71	911.52	1150.50	
PERCENT REMOVAL	81	62	81	77	72	74	81	80	78	76	72	77	76	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.2	4.3	4.7	3.5	2.9	3.0	3.8	3.8	4.2	4.3	3.0	3.2	3.8	
EFFLUENT (MG/L)	0.7	1.0	0.7	0.4	0.5	0.6	0.6	0.6	0.7	0.6	0.8	0.6	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	38.03	52.51	44.41	27.19	30.38	40.14	31.65	32.16	36.63	34.54	60.07	30.38	41.30	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KINGSTON TWP
 PLANT : KINGSTON WPCP
 WORKS NUMBER : 110000365
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 25.00 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : FRONTENAC
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 28,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	16.22	15.64	18.67	21.60	20.99	22.16	17.53	17.83	19.96	20.61	26.31	16.62	19.51	
BOD5														
INFLUENT (MG/L)	112.0	102.0	95.0	89.0	98.0	122.0	147.0	194.0	223.0	201.0	160.0	187.0	144.2	
EFFLUENT (MG/L)	9.0	7.5	6.7	3.9	6.3	5.6	4.9	9.2	8.2	11.6	8.7	20.0	8.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	145.98	117.30	125.08	84.24	132.23	124.09	85.89	164.03	163.67	239.07	228.89	332.40	165.84	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	82.0	72.0	83.0	64.0	73.0	93.0	102.0	162.0	224.0	246.0	134.0	81.0	118.0	
EFFLUENT (MG/L)	6.0	6.4	5.6	5.2	5.1	8.2	4.7	6.1	3.8	4.9	5.0	4.8	5.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	97.32	100.09	104.55	112.32	107.04	181.71	82.39	108.76	75.84	100.98	131.55	79.77	107.31	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.6	4.5	4.2	3.7	6.2	4.4	5.3	6.1	5.2	6.6	3.4	6.2	5.0	
EFFLUENT (MG/L)	0.6	0.5	0.5	0.5	0.7	0.7	0.4	0.5	0.6	0.6	0.8	0.6	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	9.73	7.82	9.33	10.80	14.69	15.51	7.01	8.91	11.97	12.36	21.04	9.97	11.71	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : L'ORIGINAL
 PLANT : L'ORIGINAL WPCP
 WORKS NUMBER : 110001701
 TREATMENT : EXTENDED AERATION
 :
 :
 :
 DESIGN CAPACITY : 0.95 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : PRESCOTT AND RUSSELL
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : OTTAWA RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,523

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.59	0.54	0.80	0.93	0.80	0.80	0.65	0.73	0.68	0.81	1.16	0.65	0.76	
BOD5														
INFLUENT (MG/L)	ND	30.0	135.0	18.0	55.0	68.0	85.0	82.0	38.0	70.0	51.0	67.0	63.5	
EFFLUENT (MG/L)	ND	4.0	25.0	11.0	4.4	11.5	10.0	8.4	5.0	5.6	4.0	7.0	8.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	2.16	20.00	10.23	3.52	9.20	6.50	6.13	3.40	4.53	4.64	4.55	6.61	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	73.0	123.0	97.0	49.0	60.0	76.0	127.0	88.0	175.0	72.0	48.0	30.0	84.8	
EFFLUENT (MG/L)	12.0	13.4	23.0	11.4	15.2	20.0	30.2	25.2	21.6	13.2	13.4	10.5	17.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.08	7.23	18.40	10.60	12.16	16.00	19.63	18.39	14.68	10.69	15.54	6.82	13.22	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.9	4.2	5.0	2.8	3.2	1.8	4.1	3.9	3.7	2.9	1.8	2.3	3.3	
EFFLUENT (MG/L)	2.8	3.4	3.6	0.6	4.3	2.3	4.0	2.2	3.8	2.9	2.4	3.4	3.0	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	1.65	1.83	2.88	0.55	3.44	1.84	2.60	1.60	2.58	2.34	2.78	2.21	2.28	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LANCASTER
 PLANT : LANCASTER LAGOON
 WORKS NUMBER : 110001925
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 DESIGN CAPACITY : 0.59 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : STORMONT, DUNDAS AND GLENGARRY
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : FINNEY CREEK
 MINOR BASIN : ST. LAWRENCE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 700

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.35	0.34	0.44	0.61	0.52	0.45	0.29	0.28	0.27	0.31	0.48	0.42	0.40	
LAGOON DISCHARGE	ND	ND	ND	42.41	35.32	ND	ND	ND	ND	ND	ND	ND	38.87	
BOD5														
INFLUENT (MG/L)	ND	110.0	140.0	72.0	71.0	101.0	30.0	129.0	96.0	165.0	61.0	236.0	110.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	3.5	ND	3.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	1.97	ND	ND	ND	ND	ND	1.68	ND	1.48	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	185.0	184.0	147.0	119.0	145.0	163.0	69.0	154.0	164.0	189.0	53.0	231.0	150.3	
EFFLUENT (MG/L)	ND	ND	ND	19.0	23.7	ND	ND	ND	ND	ND	11.9	ND	18.2	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	11.59	12.32	ND	ND	ND	ND	ND	5.71	ND	7.28	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.5	7.3	7.5	4.2	5.2	5.2	4.5	4.2	7.5	6.2	3.4	8.1	5.7	
EFFLUENT (MG/L)	ND	ND	ND	0.2	0.7	ND	ND	ND	ND	ND	2.3	ND	1.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	0.12	0.36	ND	ND	ND	ND	ND	1.10	ND	0.44	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LEEDS & LANSLOWNE FRONT
 PLANT : LANSLOWNE LAGOON
 WORKS NUMBER : 110001934
 TREATMENT : LAGOON AND SPRAY

DESIGN CAPACITY : 0.33 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : LEEDS AND GRENVILLE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : NO DISC.TO SURFACE WATER
 MINOR BASIN : ST. LAWRENCE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 546

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.20	0.18	0.21	0.29	0.29	0.25	0.20	0.20	0.20	0.21	0.25	0.19	0.22	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	18.86	20.73	12.86	ND	ND	ND	17.48	
BOD5														
INFLUENT (MG/L)	85.0	102.0	60.0	81.0	57.0	36.0	42.0	80.0	62.0	59.0	46.0	80.0	65.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	7.0	ND	ND	ND	ND	7.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	1.40	ND	ND	ND	ND	1.54	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	119.0	66.0	47.0	91.0	50.0	35.0	37.0	42.0	31.0	53.0	39.0	35.0	53.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	11.0	ND	ND	ND	ND	11.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	2.20	ND	ND	ND	ND	2.42	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.6	6.6	4.8	5.2	5.4	4.3	4.5	5.3	5.1	4.7	3.8	4.7	5.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	1.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	0.36	ND	ND	ND	ND	0.40	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	NO DIRECT DISCHARGE
SS	40.0 MG/L	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MADOC
 PLANT : MADOC LAGOON
 WORKS NUMBER : 110001051
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 1.36 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : HASTINGS
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : DEER CREEK TO MOIRA LAKE
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 850

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.68	0.74	0.72	1.02	0.95	1.06	0.67	0.69	0.83	0.65	0.96	0.70	0.81	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	153.0	111.0	107.0	94.0	93.0	89.0	137.0	125.0	142.0	106.0	76.0	137.0	114.2	
EFFLUENT (MG/L)	ND	ND	ND	7.0	8.7	ND	ND	ND	ND	ND	4.0	ND	6.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	7.14	8.26	ND	ND	ND	ND	ND	3.84	ND	5.35	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	153.0	141.0	157.0	119.0	197.0	82.0	169.0	123.0	142.0	123.0	97.0	173.0	139.7	
EFFLUENT (MG/L)	ND	ND	ND	36.0	19.8	ND	ND	ND	ND	ND	11.3	ND	22.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	36.72	18.81	ND	ND	ND	ND	ND	10.84	ND	18.14	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.6	4.4	3.4	4.3	4.2	4.2	7.2	6.5	6.7	6.8	4.3	6.4	5.3	
EFFLUENT (MG/L)	ND	ND	ND	0.5	0.4	ND	ND	ND	ND	ND	0.1	ND	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.51	0.38	ND	ND	ND	ND	ND	0.09	ND	0.24	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MARMORA
 PLANT : MARMORA WPCP
 WORKS NUMBER : 110001863
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.86 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : HASTINGS
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : CROWE RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,067

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.78	0.74	0.76	0.82	0.76	0.99	0.59	0.52	0.68	0.72	1.14	0.71	0.77	
BOD5														
INFLUENT (MG/L)	157.0	125.0	92.0	87.0	79.0	130.0	99.0	125.0	134.0	115.0	67.0	84.0	107.8	
EFFLUENT (MG/L)	12.8	4.3	7.3	4.3	6.4	6.0	2.3	4.2	2.8	5.1	2.0	4.3	5.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.98	3.18	5.54	3.52	4.86	5.94	1.35	2.18	1.90	3.67	2.28	3.05	4.00	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	145.0	125.0	176.0	126.0	116.0	109.0	178.0	205.0	245.0	167.0	102.0	194.0	157.3	
EFFLUENT (MG/L)	16.6	7.5	18.3	18.0	10.0	12.7	14.0	9.8	12.9	10.6	15.4	13.6	13.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	12.94	5.55	13.90	14.76	7.60	12.57	8.26	5.09	8.77	7.63	17.55	9.65	10.24	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.9	3.0	3.2	3.2	3.3	3.2	4.6	5.4	4.5	4.2	3.0	3.4	3.7	
EFFLUENT (MG/L)	0.5	0.2	0.2	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.5	0.4	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.39	0.14	0.15	0.24	0.30	0.49	0.29	0.31	0.40	0.43	0.57	0.28	0.31	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MAXVILLE
 PLANT : MAXVILLE WASTE STAB POND (OP SEP 89)
 WORKS NUMBER : 110002719
 TREATMENT : CONVENTIONAL LAGOON ANNUAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.45 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : STORMONT, DUNDAS AND GLENGARRY
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : SCOTCH RIVER
 MINOR BASIN : ST. LAWRENCE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	0.32	0.05	0.10	0.13	0.15	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
<u>BOD5</u>														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DISCHARGE
SS	NA	NO DISCHARGE
TP	NA	NO DISCHARGE

NOTE:

BOD - HAS NO CRITERIA
 SS - HAS NO CRITERIA
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MERRICKVILLE
 PLANT : MERRICKVILLE WPCP
 WORKS NUMBER : 110001729
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.50 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : LEEDS AND GRENVILLE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : RIDEAU RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 797

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.38	0.35	0.47	0.67	0.73	0.55	0.39	0.37	0.36	0.35	0.55	0.39	0.46	
BOD5														
INFLUENT (MG/L)	55.0	76.0	114.0	48.0	43.0	50.0	78.0	71.0	92.0	64.0	70.0	129.0	74.2	
EFFLUENT (MG/L)	4.0	6.4	27.3	34.0	16.0	4.0	3.5	2.3	1.7	4.0	2.2	2.8	9.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.52	2.24	12.83	22.78	11.68	2.20	1.36	0.85	0.61	1.40	1.21	1.09	4.14	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	84.0	88.0	225.0	59.0	53.0	58.0	140.0	86.0	92.0	58.0	83.0	149.0	97.9	
EFFLUENT (MG/L)	15.0	11.6	56.8	58.0	19.0	9.0	7.8	6.0	8.1	6.4	12.2	15.5	18.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.70	4.06	26.69	38.86	13.87	4.95	3.04	2.22	2.91	2.24	6.71	6.04	8.65	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.2	4.9	6.7	3.3	4.3	4.8	6.7	5.6	4.9	4.1	4.8	4.4	5.0	
EFFLUENT (MG/L)	0.6	0.4	1.9*	1.9*	0.8	0.4	26.9*	0.6	0.7	0.5	0.6	0.6	3.0	3
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.22	0.14	0.89	1.27	0.58	0.22	10.49	0.22	0.25	0.17	0.33	0.23	1.38	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MORRISBURG
 PLANT : MORRISBURG WPCP
 WORKS NUMBER : 120000168
 TREATMENT : PRIMARY
 : CONVENTIONAL LAGOON CONTINUOUS
 :
 DESIGN CAPACITY : 2.27 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : STORMONT, DUNDAS AND GLENGARRY
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : ST. LAWRENCE RIVER
 MINOR BASIN : ST. LAWRENCE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,350

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.74	2.64	2.67	3.29	3.27	3.31	2.81	2.93	2.48	2.71	3.32	2.67	2.90	
BOD5														
INFLUENT (MG/L)	16.0	22.0	98.0	10.0	300.0	190.0	14.0	24.0	44.0	60.0	ND	130.0	82.5	
EFFLUENT (MG/L)	21.0	26.0	29.0	17.0	11.0	20.0	10.0	11.0	23.0	18.0	25.0	18.0	19.1	
LOADING (KG/D)	57.54	68.64	77.43	55.93	35.97	66.20	28.10	32.23	57.04	48.78	83.00	48.06	55.39	
PERCENT REMOVAL	ND	ND	70	ND	96	89	29	54	48	70		86	77	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	5.0	19.0	78.0	25.0	261.0	117.0	12.0	27.0	25.0	33.0	ND	82.0	62.2	
EFFLUENT (MG/L)	21.0	13.0	24.0	12.0	40.0	20.0	14.0	40.0	90.0	65.2	78.0	30.0	37.3	
LOADING (KG/D)	57.54	34.32	64.08	39.48	130.80	66.20	39.34	117.20	223.20	176.69	258.96	80.10	108.17	
PERCENT REMOVAL	ND	32	69	52	85	83	ND	ND	ND	ND		63	40*	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	1.3	1.7	5.1	0.9	4.3	3.8	1.8	3.2	3.4	1.9	ND	3.7	2.8	
EFFLUENT (MG/L)	2.5	2.8	3.0	1.4	1.8	2.0	0.8	1.9	2.6	2.0	2.0	2.0	2.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	6.85	7.39	8.01	4.60	5.88	6.62	2.24	5.56	6.44	5.42	6.64	5.34	6.09	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30%	YES
SS	50%	NO
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

EQUIPMENT/MAINTENANCE - EXISTING EQUIPMENT BEING REPAIRED
 NO ACTION - MARGINAL FAILURE-MONITORING LEVEL OF FAILED PARAMETER CLOSELY

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NAPANEE
 PLANT : NAPANEE WPCP
 WORKS NUMBER : 120000186
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 9.09 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : LENNOX & ADDINGTON
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : NAPANEE RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 7,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.68	4.29	5.61	6.93	6.19	6.47	5.27	6.15	5.78	5.90	10.05	5.56	6.07	
BOD5														
INFLUENT (MG/L)	221.0	142.0	147.0	89.0	77.0	77.0	66.0	123.0	119.0	83.0	68.0	90.0	108.5	
EFFLUENT (MG/L)	13.3	17.8	17.9	9.3	8.7	6.7	6.0	10.0	2.4	3.1	4.5	3.8	8.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	62.24	76.36	100.41	64.44	53.85	43.34	31.62	61.50	13.87	18.29	45.22	21.12	52.20	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	202.0	178.0	218.0	147.0	174.0	131.0	76.0	107.0	117.0	122.0	87.0	133.0	141.0	
EFFLUENT (MG/L)	13.0	23.8	20.4	16.4	10.7	14.0	12.5	15.0	11.1	13.5	10.6	10.0	14.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	60.84	102.10	114.44	113.65	66.23	90.58	65.87	92.25	64.15	79.65	106.53	55.60	86.80	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	9.4	8.0	9.2	7.6	7.2	7.6	5.4	10.4	7.2	8.7	4.9	6.9	7.7	
EFFLUENT (MG/L)	0.6	1.0	1.2*	0.9	0.7	0.8	1.0	1.6*	1.1*	0.8	0.7	0.8	0.9	3
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.80	4.29	6.73	6.23	4.33	5.17	5.27	9.84	6.35	4.72	7.03	4.44	5.46	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - MONITORING PROCEDURES BEING UPGRADED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989/12	1990	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NEPEAN
 PLANT : WATTS CREEK WPCP
 WORKS NUMBER : 120000701
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 29.54 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : OTTAWA-CARLETON, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : WATTS CREEK
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 52,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	25.10	24.00	31.60	34.70	33.50	28.70	24.60	24.00	23.60	25.20	31.30	25.50	27.65	
BOD5														
INFLUENT (MG/L)	129.0	121.0	107.0	103.0	104.0	110.0	82.0	90.0	114.0	129.0	78.0	106.0	106.1	
EFFLUENT (MG/L)	9.0	15.0	17.0	13.0	17.0	11.0	9.0	11.0	6.0	7.0	6.0	3.0	10.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	225.90	360.00	537.20	451.10	569.50	315.70	221.40	264.00	141.60	176.40	187.80	76.50	284.80	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	148.0	137.0	118.0	159.0	136.0	142.0	100.0	120.0	133.0	138.0	111.0	164.0	133.8	
EFFLUENT (MG/L)	11.0	12.0	12.0	13.0	12.0	8.0	10.0	8.0	8.0	11.0	9.0	12.0	10.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	276.10	288.00	379.20	451.10	402.00	229.60	246.00	192.00	188.80	277.20	281.70	306.00	290.33	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.4	5.3	4.3	4.3	4.2	4.2	4.0	4.9	4.8	5.0	3.6	5.1	4.6	
EFFLUENT (MG/L)	1.0	0.9	0.9	1.0	1.0	0.9	1.0	0.9	1.1*	0.9	1.0	0.9	1.0	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	25.10	21.60	28.44	34.70	33.50	25.83	24.60	21.60	25.96	22.68	31.30	22.95	27.65	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : OSNABRUCK
 PLANT : INGLESIDE WPCP
 WORKS NUMBER : 120000140
 TREATMENT : PRIMARY
 :
 :
 DESIGN CAPACITY : 1.57 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : STORMONT, DUNDAS AND GLENGARRY
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : ST. LAWRENCE RIVER
 MINOR BASIN : ST. LAWRENCE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.76	0.66	1.06	1.49	1.46	1.62	0.86	0.96	0.80	1.10	1.90	0.70	1.11	
<u>BOD5</u>														
INFLUENT (MG/L)	96.0	104.0	295.0	26.0	165.0	64.0	90.0	ND	110.0	34.0	15.0	105.0	100.4	
EFFLUENT (MG/L)	57.0	52.0	86.0	9.0	58.0	19.0	45.0	ND	7.0	31.0	17.0	54.0	39.5	
LOADING (KG/D)	43.32	34.32	91.16	13.41	84.68	30.78	38.70	ND	5.60	34.10	32.30	37.80	43.85	
PERCENT REMOVAL	41	50	71	65	65	70	50		94	09	ND	49	61	
PERCENT REMOVAL LIMITS													30	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	84.0	98.0	6,220.0	55.0	280.0	223.0	154.0	ND	180.0	48.0	16.0	111.0	679.0	
EFFLUENT (MG/L)	50.0	47.0	168.0	25.0	180.0	50.0	42.0	ND	50.0	29.0	15.0	38.0	63.1	
LOADING (KG/D)	38.00	31.02	178.08	37.25	262.80	81.00	36.12	ND	40.00	31.90	28.50	26.60	70.04	
PERCENT REMOVAL	40	52	97	55	36	78	73		72	40	06	66	91	
PERCENT REMOVAL LIMITS													50	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	5.1	5.6	9.5	2.3	5.3	4.5	5.2	ND	5.1	6.4	1.5	5.5	5.1	
EFFLUENT (MG/L)	4.1	3.8	6.4	1.7	4.2	2.1	4.0	ND	4.6	2.7	1.1	ND	3.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	3.11	2.50	6.78	2.53	6.13	3.40	3.44	ND	3.68	2.97	2.09	ND	3.89	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30%	YES
SS	50%	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PEMBROKE
 PLANT : PEMBROKE WPCP
 WORKS NUMBER : 120000630
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 18.18 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : RENFREW
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : OTTAWA RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 17,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	12.58	12.45	13.10	13.04	12.93	12.70	12.57	12.59	12.54	12.44	12.52	12.61	12.67	
BOD5														
INFLUENT (MG/L)	100.0	96.0	114.0	114.0	68.0	73.0	76.0	56.0	63.0	120.0	118.0	122.0	93.3	
EFFLUENT (MG/L)	24.5	15.0	18.8	25.0	12.5	15.0	13.8	11.8	13.0	12.0	15.5	33.0	17.5	
LOADING (KG/D)	308.21	186.75	246.28	326.00	161.62	190.50	173.46	148.56	163.02	149.28	194.06	416.13	221.73	
PERCENT REMOVAL	76	84	84	78	82	79	82	79	79	90	87	73	81	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	89.0	92.0	125.0	107.0	112.0	125.0	106.0	72.0	84.0	93.0	121.0	98.0	102.0	
EFFLUENT (MG/L)	11.7	11.9	16.8	13.3	14.3	16.7	13.8	9.5	11.0	12.0	15.9	13.1	13.3	
LOADING (KG/D)	147.18	148.15	220.08	173.43	184.89	212.09	173.46	119.60	137.94	149.28	199.06	165.19	168.51	
PERCENT REMOVAL	87	87	87	88	87	87	87	87	87	87	87	87	87	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.5	4.3	4.4	2.9	ND	3.6	3.3	3.2	3.3	3.7	3.3	4.4	3.7	
EFFLUENT (MG/L)	0.7	0.6	0.6	0.6	0.1	0.7	0.8	0.6	0.7	0.7	0.7	0.9	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	8.80	7.47	7.86	7.82	1.29	8.89	10.05	7.55	8.77	8.70	8.76	11.34	7.60	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PERTH
 PLANT : PERTH LAGOON
 WORKS NUMBER : 120000881
 TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 5.91 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : LANARK
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : TAY RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 5,648

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.76	5.32	5.20	6.61	6.31	5.43	5.05	3.62	4.14	4.15	4.77	4.16	5.04	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	335.0	108.0	88.0	205.0	255.0	46.0	155.0	130.0	175.0	96.0	48.0	600.0	186.8	
EFFLUENT (MG/L)	9.0	55.0	53.0	23.0	11.0	9.0	6.0	4.0	4.0	4.0	6.0	18.0	16.8	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	51.84	292.60	275.60	152.03	69.41	48.87	30.30	14.48	16.56	16.60	28.62	74.88	84.67	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	91.0	122.0	135.0	61.0	52.0	67.0	146.0	286.0	78.0	72.0	82.0	250.0	120.2	
EFFLUENT (MG/L)	14.0	24.0	30.0	11.0	17.0	12.0	9.0	3.0	2.8	14.0	10.0	14.0	13.4	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	80.64	127.68	156.00	72.71	107.27	65.16	45.45	10.86	11.59	58.10	47.70	58.24	67.54	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	1.8	2.6	4.5	2.6	3.2	2.0	4.0	4.5	2.8	3.7	3.0	15.8	4.2	
EFFLUENT (MG/L)	0.6	0.5	0.6	0.4	0.2	0.3	0.5	0.5	0.5	0.4	0.8	0.8	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	3.45	2.66	3.12	2.64	1.26	1.62	2.52	1.81	2.07	1.66	3.81	3.32	2.52	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PETAWAWA
 PLANT : PETAWAWA WPCP
 WORKS NUMBER : 120000587
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 4.54 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : RENFREW
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : OTTAWA RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 9,800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.97	4.54	5.10	5.04	4.50	4.71	4.69	4.82	5.15	5.42	4.45	3.73	4.68	
BOD5														
INFLUENT (MG/L)	123.0	168.0	140.0	140.0	119.0	102.0	118.0	114.0	162.0	132.0	115.0	192.0	135.4	
EFFLUENT (MG/L)	29.0	56.2	43.6	42.8	29.6	18.0	12.7	9.9	28.8	34.6	15.6	32.7	29.5	
LOADING (KG/D)	115.13	255.14	222.36	215.71	133.20	84.78	59.56	47.71	148.32	187.53	69.42	121.97	138.06	
PERCENT REMOVAL	76	67	69	69	75	82	89	91	82	74	86	83	78	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	94.0	148.0	123.0	113.0	120.0	100.0	123.0	113.0	178.0	132.0	151.0	142.0	128.1	
EFFLUENT (MG/L)	13.7	14.3	34.0	16.5	16.7	11.9	15.2	9.0	12.7	31.0	20.7	12.7	17.4	
LOADING (KG/D)	54.38	64.92	173.40	83.16	75.15	56.04	71.28	43.38	65.40	168.02	92.11	47.37	81.43	
PERCENT REMOVAL	85	90	72	85	86	88	88	92	93	77	86	91	86	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.9	5.7	4.9	5.3	4.7	5.4	5.6	5.6	6.9	6.2	7.4	6.3	5.7	
EFFLUENT (MG/L)	0.7	0.4	0.4	0.7	0.5	0.5	0.6	0.4	0.6	1.2*	0.6	0.3	0.6	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.77	1.81	2.04	3.52	2.25	2.35	2.81	1.92	3.09	6.50	2.67	1.11	2.81	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

START DATE END DATE ANTICIPATED
 COMPLIANCE

NO ACTION - MARGINAL FAILURE-MONITORING LEVEL OF FAILED PARAMETER CLOSELY

1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PICTON
 PLANT : PICTON WPCP
 WORKS NUMBER : 120000667
 TREATMENT : CONTACT STABILIZATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 4.54 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : PRINCE EDWARD
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : PICTON BAY
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.84	2.62	3.29	3.81	6.64	3.00	2.52	2.40	2.13	2.10	2.97	2.36	3.06	
BOD5														
INFLUENT (MG/L)	72.0	82.0	100.0	45.0	49.0	47.0	70.0	37.0	69.0	57.0	76.0	31.0	61.3	
EFFLUENT (MG/L)	11.5	14.5	17.5	11.5	8.5	9.0	7.5	7.0	8.0	9.7	7.0	18.0	10.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	32.66	37.99	57.57	43.81	56.44	27.00	18.90	16.80	17.04	20.37	20.79	42.48	33.05	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	65.0	99.0	156.0	52.0	49.0	110.0	45.0	38.0	73.0	48.0	73.0	25.0	69.4	
EFFLUENT (MG/L)	11.5	15.0	24.0	14.0	7.0	5.0	4.0	3.5	8.9	14.3	16.5	17.0	11.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	32.66	39.30	78.96	53.34	46.48	15.00	10.08	8.40	18.95	30.03	49.00	40.12	35.80	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.6	5.2	4.4	2.8	2.8	4.1	3.5	3.5	4.7	4.3	4.9	2.1	3.8	
EFFLUENT (MG/L)	0.5	0.6	0.9	0.4	0.2	0.3	0.4	0.5	0.4	0.4	0.7	0.7	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.42	1.57	2.96	1.52	1.32	0.90	1.00	1.20	0.85	0.84	2.07	1.65	1.53	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PITTSBURG
PLANT : CANA WPCP
WORKS NUMBER : 110001505
TREATMENT : EXTENDED AERATION

DESIGN CAPACITY : 0.09 (1000 M3)

REGION : SOUTHEAST
DISTRICT : FRONTENAC
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CATARAQUI RIVER
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 108

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.04	0.04	0.05	0.07	0.07	0.06	0.02	0.02	0.01	0.02	0.07	0.04	0.04	
BOD5														
INFLUENT (MG/L)	106.0	88.0	92.0	54.0	67.0	96.0	118.0	173.0	199.0	154.0	76.0	105.0	110.7	
EFFLUENT (MG/L)	4.9	3.6	10.4	5.0	3.6	4.5	3.6	3.4	4.3	5.9	6.0	4.2	5.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.19	0.14	0.52	0.35	0.25	0.27	0.07	0.06	0.04	0.11	0.42	0.16	0.20	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	89.0	79.0	94.0	39.0	99.0	81.0	123.0	120.0	138.0	99.0	72.0	72.0	92.1	
EFFLUENT (MG/L)	22.8	17.0	32.2	12.6	17.5	15.7	10.4	13.5	15.8	16.0	25.8	24.6	18.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.91	0.68	1.61	0.88	1.22	0.94	0.20	0.27	0.15	0.32	1.80	0.98	0.75	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.7	5.7	6.2	2.3	3.7	5.6	5.9	6.9	8.4	6.3	2.8	4.9	5.4	
EFFLUENT (MG/L)	2.8	2.7	3.4	1.4	2.3	2.9	2.6	4.4	4.4	4.0	3.9	2.9	3.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.11	0.10	0.17	0.09	0.16	0.17	0.05	0.08	0.04	0.08	0.27	0.11	0.12	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PLANTAGENET
 PLANT : PLANTAGENET LAGOON
 WORKS NUMBER : 110001621
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 :
 DESIGN CAPACITY : 0.59 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : PRESCOTT AND RUSSELL
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : SOUTH NATION RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 876

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.44	0.44	0.59	0.67	0.64	0.65	0.71	0.69	0.64	0.75	0.93	0.52	0.64	
LAGOON DISCHARGE	ND	ND	ND	ND	8.00	103.00	ND	ND	ND	ND	107.50	22.70	60.30	
BOD5														
INFLUENT (MG/L)	ND	ND	170.0	ND	106.0	84.0	118.0	202.0	125.0	139.0	165.0	45.0	128.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	5.5	ND	ND	ND	ND	ND	2.8	4.0	4.1	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	3.52	ND	ND	ND	ND	ND	2.60	2.08	2.62	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	172.0	190.0	241.0	164.0	322.0	269.0	277.0	558.0	432.0	234.0	150.0	104.0	259.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	8.3	ND	ND	ND	ND	ND	9.8	4.0	7.4	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	5.31	ND	ND	ND	ND	ND	9.11	2.08	4.74	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.3	7.1	7.5	3.0	7.1	5.3	5.4	7.1	8.4	3.3	6.6	3.8	5.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.6	ND	ND	ND	ND	ND	0.3	0.4	0.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.38	ND	ND	ND	ND	ND	0.27	0.20	0.26	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PRESCOTT
 PLANT : EDWARDSBURGH WPCP
 WORKS NUMBER : 110001122
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 5.68 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : LEEDS AND GRENVILLE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : ST. LAWRENCE RIVER
 MINOR BASIN : ST. LAWRENCE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,595

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.98	3.76	4.71	5.50	5.35	5.08	3.95	3.36	3.47	3.75	5.28	3.82	4.33	
BOD5														
INFLUENT (MG/L)	75.0	90.0	86.0	65.0	51.0	29.0	39.0	56.0	49.0	56.0	28.0	47.0	55.9	
EFFLUENT (MG/L)	30.0	23.5	17.0	12.0	19.0	8.0	14.0	14.0	13.0	15.5	14.3	20.3	16.7	
LOADING (KG/D)	119.40	88.36	80.07	66.00	119.0	40.64	55.30	47.04	45.11	58.12	75.50	77.54	72.67	
PERCENT REMOVAL	60	74	80	82	63	72	64	75	73	72	49	57	70	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	102.0	168.0	133.0	122.0	121.0	82.0	99.0	149.0	117.0	123.0	88.0	118.0	118.5	
EFFLUENT (MG/L)	21.0	22.0	18.5	13.0	17.5	16.0	17.0	17.0	22.7	19.6	13.8	14.5	17.7	
LOADING (KG/D)	83.58	82.72	87.13	71.50	93.62	81.28	67.15	57.12	78.76	73.50	72.86	55.39	76.64	
PERCENT REMOVAL	79	87	86	89	86	80	83	89	81	84	84	88	85	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.1	5.2	3.8	3.2	2.9	ND	2.7	4.6	3.3	3.2	1.5	3.0	3.3	
EFFLUENT (MG/L)	0.6	0.7	0.5	0.3	0.4	0.2	0.4	0.6	0.8	0.5	0.2	ND	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.38	2.63	2.35	1.65	2.14	1.01	1.58	2.01	2.77	1.87	1.05	ND	2.17	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - PROCESS CONTROL BEING UPGRADED
 OPERATIONAL/PROCESS - PHASING OUT EXISTING FACILITY

START DATE END DATE ANTICIPATED
 COMPLIANCE

1989

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RENFREW
 PLANT : RENFREW WPCP
 WORKS NUMBER : 120000603
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 8.63 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : RENFREW
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : BONNECHERE RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 8,200

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.34	4.09	6.00	5.78	6.07	5.80	5.74	4.86	7.05	7.05	9.82	5.07	5.97	
BOD5														
INFLUENT (MG/L)	72.0	86.0	24.0	53.0	16.0	20.0	29.0	26.0	13.0	60.0	28.0	135.0	46.8	
EFFLUENT (MG/L)	20.0	16.0	10.0	11.5	6.0	5.0	6.5	8.0	4.4	7.6	7.0	22.0	10.3	
LOADING (KG/D)	86.80	65.44	60.00	66.47	36.42	29.00	37.31	38.88	31.02	53.58	68.74	111.54	61.49	
PERCENT REMOVAL	72	81	58	78	63	75	78	69	66	87	75	84	78	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	104.0	123.0	81.0	214.0	42.0	61.0	60.0	52.0	37.0	62.0	57.0	119.0	84.3	
EFFLUENT (MG/L)	15.0	20.0	29.0	14.0	9.0	8.0	12.0	10.0	6.0	11.0	9.0	21.0	13.7	
LOADING (KG/D)	65.10	81.80	174.00	80.92	54.63	46.40	68.88	48.60	42.30	77.55	88.38	106.47	81.79	
PERCENT REMOVAL	86	84	64	93	79	87	80	81	84	82	84	82	84	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.7	4.0	1.6	3.7	0.8	2.3	2.3	2.1	0.8	3.7	1.5	5.5	2.7	
EFFLUENT (MG/L)	0.2	0.4	0.8	0.4	0.2	0.2	0.7	0.4	0.2	0.4	0.2	0.5	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.86	1.63	4.80	2.31	1.21	1.16	4.01	1.94	1.41	2.82	1.96	2.53	2.39	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ROCKLAND
 PLANT : ROCKLAND LAGOON
 WORKS NUMBER : 110001159
 TREATMENT : AERATED CELL PLUS LAGOON
 : CONTINUOUS DISCHARGE
 :
 DESIGN CAPACITY : 3.34 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : PRESCOTT AND RUSSELL
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : OTTAWA RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 6,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.80	1.75	2.29	2.82	2.44	2.49	2.07	2.14	2.08	2.28	3.05	2.18	2.28	
LAGOON DISCHARGE	55.80	49.00	70.90	84.60	75.61	74.82	64.02	66.24	62.40	70.79	91.50	67.56	69.44	
BOD5														
INFLUENT (MG/L)	ND	ND	ND	210.0	68.0	64.0	106.0	156.0	148.0	108.0	132.0	115.0	123.0	
EFFLUENT (MG/L)	ND	ND	ND	7.0	6.8	6.3	11.8	15.0	32.3	6.0	5.7	31.0	13.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	19.74	16.59	15.68	24.42	32.10	67.18	13.68	17.38	67.58	30.78	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	282.0	233.0	101.0	121.0	149.0	88.0	197.0	239.0	144.0	191.0	303.0	295.0	195.3	
EFFLUENT (MG/L)	21.0	29.0	33.0	23.5	21.6	18.3	28.0	38.4	18.1	19.8	7.1	17.3	22.9	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	37.80	50.75	75.57	66.27	52.70	45.56	57.96	82.17	37.64	45.14	21.65	37.71	52.21	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.1	5.0	5.1	4.0	4.3	5.3	5.1	5.5	5.5	5.8	5.1	6.7	5.3	
EFFLUENT (MG/L)	2.5	3.6	3.6	2.9	2.0	3.3	1.7	2.3	2.5	3.0	2.6	3.3	2.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	4.50	6.30	8.24	8.17	4.88	8.21	3.51	4.92	5.20	6.84	7.93	7.19	6.38	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RUSSELL
 PLANT : EMBRUN P.V.LAGOON
 WORKS NUMBER : 120002004
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 DESIGN CAPACITY : 1.60 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : PRESCOTT AND RUSSELL
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE :
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.76	0.78	0.93	0.97	1.15	0.88	0.85	0.99	0.94	1.10	0.94	1.10	0.95	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	300.0	190.0	135.0	180.0	130.0	105.0	190.0	90.0	165.0	210.0	165.0	165.0	168.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	600.0	405.0	213.0	113.0	305.0	136.0	196.0	136.0	135.0	123.0	135.0	220.0	226.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	22.7	14.1	8.5	8.6	7.2	9.9	9.6	8.7	7.8	9.6	7.8	9.2	10.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	NO DISCHARGE
SS	40.0 MG/L	NO DISCHARGE
TP	NA	NO DISCHARGE

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RUSSELL
 PLANT : RUSSELL LAGOON
 WORKS NUMBER : 110001514
 TREATMENT : CONVENTIONAL LAGOON ANNUAL
 :
 :
 DESIGN CAPACITY : 1.00 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : PRESCOTT AND RUSSELL
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : CASTOR RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,400

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.28	0.30	0.38	0.32	0.38	0.29	0.27	0.34	0.31	0.37	0.53	0.39	0.35	
LAGOON DISCHARGE	ND	ND	ND	ND	109.00	ND	ND	ND	ND	ND	ND	ND	109.00	
BOD5														
INFLUENT (MG/L)	77.0	242.0	188.0	126.0	50.0	70.0	91.0	98.0	105.0	146.0	74.0	149.0	118.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	16.3	ND	ND	ND	ND	ND	ND	ND	16.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	6.19	ND	ND	ND	ND	ND	ND	ND	5.71	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	67.0	550.0	350.0	246.0	56.0	108.0	76.0	140.0	68.0	266.0	92.0	61.0	173.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	72.3	ND	ND	ND	ND	ND	ND	ND	72.3*	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	27.47	ND	ND	ND	ND	ND	ND	ND	25.31	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.6	14.1	7.7	10.4	5.8	7.0	8.3	8.0	7.2	8.0	5.6	7.5	8.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.8	ND	ND	ND	ND	ND	ND	ND	0.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.30	ND	ND	ND	ND	ND	ND	ND	0.28	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SIDNEY
 PLANT : BATAWA WPCP
 WORKS NUMBER : 110000668
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.56 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : HASTINGS
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : TRENT RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 300

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.53	0.51	0.42	0.58	0.57	0.29	0.21	0.21	0.19	0.28	0.77	0.30	0.41	
BOD5														
INFLUENT (MG/L)	124.0	177.0	62.0	53.0	90.0	69.0	148.0	178.0	72.0	126.0	99.0	76.0	106.2	
EFFLUENT (MG/L)	6.6	8.3	7.0	5.0	3.0	4.5	3.0	3.1	2.2	4.3	8.0	1.0	4.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.49	4.23	2.94	2.90	1.71	1.30	0.63	0.65	0.41	1.20	6.16	0.30	1.93	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	55.0	73.0	55.0	78.0	60.0	74.0	122.0	71.0	120.0	81.0	65.0	88.0	78.5	
EFFLUENT (MG/L)	18.0	13.0	21.6	21.0	11.0	13.0	8.0	7.6	6.2	8.5	14.0	9.8	12.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.54	6.63	9.07	12.18	6.27	3.77	1.68	1.59	1.17	2.38	10.78	2.94	5.17	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.1	4.1	5.7	2.9	6.8	4.9	4.0	3.8	2.5	4.0	4.0	1.6	4.0	
EFFLUENT (MG/L)	1.0	0.6	9.4*	1.7*	0.7	0.7	0.5	0.4	0.2	0.4	0.5	0.4	1.4	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.53	0.30	3.94	0.98	0.39	0.20	0.10	0.08	0.03	0.11	0.38	0.12	0.57	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SMITHS FALLS
 PLANT : SMITHS FALLS WPCP
 WORKS NUMBER : 120000890
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 11.36 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : LANARK
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : RIDEAU RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 11,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	9.09	8.56	10.73	12.54	14.61	13.76	10.87	7.82	7.80	8.54	11.13	8.25	10.31	
BOD5														
INFLUENT (MG/L)	139.0	98.0	115.0	86.0	198.0	95.0	124.0	81.0	90.0	85.0	135.0	440.0	140.5	
EFFLUENT (MG/L)	141.0	29.0	16.0	13.0	29.5	16.0	8.0	11.5	17.0	38.0	11.5	26.0	29.7	
LOADING (KG/D)	1281.69	248.24	171.68	163.02	430.99	220.16	86.96	89.93	132.60	324.52	127.99	214.50	306.21	
PERCENT REMOVAL	ND	70	86	85	85	83	94	86	81	55	91	94	79	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	205.0	107.0	111.0	76.0	105.0	243.0	89.0	105.0	105.0	129.0	294.0	169.0	144.8	
EFFLUENT (MG/L)	57.0	28.0	19.0	22.0	29.5	22.5	23.5	40.0	30.0	36.0	24.5	23.0	29.6	
LOADING (KG/D)	518.13	239.68	203.87	275.88	430.99	309.60	255.44	312.80	234.00	307.44	272.68	189.75	305.18	
PERCENT REMOVAL	72	74	83	71	72	91	74	62	71	72	92	86	80	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.5	5.0	5.5	3.6	3.2	4.4	3.6	5.8	4.0	4.8	6.6	5.7	4.7	
EFFLUENT (MG/L)	1.7*	0.4	0.6	0.4	0.5	0.6	1.0	2.0*	1.2*	0.7	0.9	0.5	0.9	3
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	15.45	3.42	6.43	5.01	7.30	8.25	10.87	15.64	9.36	5.97	10.01	4.12	9.28	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENVIRONMENTAL ASSESSMENT BEING CONDUCTED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988	1990	1993

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ST ISIDORE DE PRESCOTT
 PLANT : ST.ISIDORE LAGOON
 WORKS NUMBER : 110002210
 TREATMENT : CONVENTIONAL LAGOON ANNUAL
 :
 :
 DESIGN CAPACITY : 0.65 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : PRESCOTT AND RUSSELL
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : SCOTCH RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 772

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.24	0.23	0.27	0.29	0.31	0.34	0.40	0.40	0.39	0.39	0.48	0.40	0.35	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	190.0	248.0	101.0	134.0	99.0	95.0	127.0	225.0	162.0	155.0	165.0	238.0	161.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	7.0	ND	ND	ND	ND	ND	ND	ND	7.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	2.17	ND	ND	ND	ND	ND	ND	ND	2.45	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	141.0	206.0	99.0	125.0	125.0	92.0	78.0	307.0	135.0	159.0	120.0	189.0	148.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	296.7	ND	ND	ND	ND	ND	ND	ND	296.7*	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	91.97	ND	ND	ND	ND	ND	ND	ND	103.85	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	11.1	14.0	8.9	9.8	7.6	7.6	6.7	11.2	9.0	9.1	8.0	11.9	9.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	1.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.49	ND	ND	ND	ND	ND	ND	ND	0.56	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	NO
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED

START DATE END DATE ANTICIPATED
 COMPLIANCE

1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : STIRLING
 PLANT : STIRLING LAGOON
 WORKS NUMBER : 110000686
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 1.13 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : HASTINGS
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : RAWDON CREEK
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,700

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	9.84	0.75	1.04	0.93	0.94	0.96	0.86	0.94	1.03	0.87	1.08	1.08	1.69	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	7460.00	ND	ND	ND	7460.00	
BOD5														
INFLUENT (MG/L)	660.0	720.0	300.0	100.0	45.0	230.0	46.0	24.0	40.0	ND	10.0	1,200.0	306.8	
EFFLUENT (MG/L)	ND	ND	ND	18.0	2.0	ND	ND	ND	9.0	ND	ND	ND	9.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	16.74	1.88	ND	ND	ND	9.27	ND	ND	ND	16.39	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	344.0	757.0	370.0	107.0	39.0	370.0	85.0	60.0	88.0	ND	11.0	1,580.0	346.5	
EFFLUENT (MG/L)	ND	ND	ND	76.0	27.0	ND	ND	ND	27.0	ND	ND	ND	43.3*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	70.68	25.38	ND	ND	ND	27.81	ND	ND	ND	73.18	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	16.4	15.6	15.3	7.0	5.6	15.3	4.9	3.4	7.1	ND	1.8	76.5	15.4	
EFFLUENT (MG/L)	ND	ND	ND	1.7*	0.3	ND	ND	ND	1.0	ND	ND	ND	1.0	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	ND	ND	ND	1.58	0.28	ND	ND	ND	1.03	ND	ND	ND	1.69	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - INFILTRATION PROBLEMS BEING CORRECTED
 FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1990/06	1990/12	1990
1990/06	1990/12	1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TRENTON
 PLANT : TRENTON WPCP
 WORKS NUMBER : 110000775
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 15.91 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : HASTINGS
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BAY OF QUINTE
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 15,346

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	13.50	10.31	11.01	12.87	12.94	12.03	8.62	9.25	9.92	11.03	15.09	9.94	11.38	
BOD5														
INFLUENT (MG/L)	317.0	289.0	202.0	170.0	341.0	237.0	258.0	276.0	166.0	204.0	196.0	185.0	236.8	
EFFLUENT (MG/L)	20.5	24.0	14.0	11.8	15.2	10.4	6.0	7.0	5.9	7.3	10.5	15.3	12.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	276.75	247.44	154.14	151.86	196.68	125.11	51.72	64.75	58.52	80.51	158.44	152.08	139.97	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	142.0	155.0	160.0	86.0	106.0	135.0	112.0	104.0	116.0	114.0	115.0	119.0	122.0	
EFFLUENT (MG/L)	24.7	35.6	24.9	22.3	20.9	18.3	14.0	14.6	14.0	14.1	15.0	14.2	19.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	333.45	367.03	274.14	287.00	270.44	220.14	120.68	135.05	138.88	155.52	226.35	141.14	220.77	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.8	6.9	8.1	6.0	7.2	6.0	5.3	5.6	7.0	6.8	5.8	5.7	6.6	
EFFLUENT (MG/L)	0.7	0.4	0.4	0.6	0.5	0.5	0.6	0.6	0.5	0.4	0.7	0.5	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	9.45	4.12	4.40	7.72	6.47	6.01	5.17	5.55	4.96	4.41	10.56	4.97	5.69	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TWEED
 PLANT : TWEED LAGOON
 WORKS NUMBER : 120000952
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.20 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : HASTINGS
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MOIRA RIVER
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,607

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.06	1.26	1.13	2.16	1.47	1.29	0.92	0.69	0.76	1.01	1.75	1.33	1.24	
LAGOON DISCHARGE	ND	ND	ND	85.12	150.86	ND	ND	ND	ND	ND	ND	ND	117.99	
BOD5														
INFLUENT (MG/L)	98.0	92.0	86.0	70.0	71.0	54.0	ND	107.0	173.0	79.0	88.0	83.0	91.0	
EFFLUENT (MG/L)	ND	ND	ND	15.8	5.6	ND	ND	ND	ND	ND	10.0	ND	10.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	34.12	8.23	ND	ND	ND	ND	ND	17.50	ND	13.02	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	114.0	93.0	99.0	86.0	74.0	66.0	107.0	121.0	265.0	83.0	134.0	ND	112.9	
EFFLUENT (MG/L)	ND	ND	ND	30.8	12.4	ND	ND	ND	ND	ND	17.0	ND	20.1	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	66.52	18.22	ND	ND	ND	ND	ND	29.75	ND	24.92	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.8	3.8	15.6	3.2	3.6	3.6	7.1	7.4	7.2	3.9	3.1	4.3	5.6	
EFFLUENT (MG/L)	ND	ND	ND	1.2*	0.3	ND	ND	ND	ND	ND	0.2	ND	0.6	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	2.59	0.44	ND	ND	ND	ND	ND	0.35	ND	0.74	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW
 NO ACTION - MARGINAL FAILURE-MONITORING LEVEL OF FAILED PARAMETER CLOSELY

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1990
 1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : VANKLEEK HILL
 PLANT : VANKLEEK HILL LAGOON
 WORKS NUMBER : 110001658
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 :
 DESIGN CAPACITY : 0.90 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : PRESCOTT AND RUSSELL
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LITTLE RIDEAU CREEK
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,711

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.82	0.78	1.24	1.17	0.90	0.91	0.71	0.83	0.76	0.82	1.29	0.92	0.93	
LAGOON DISCHARGE	ND	ND	ND	37.63	21.08	ND	ND	ND	ND	ND	19.68	9.96	22.09	
BOD5														
INFLUENT (MG/L)	ND	48.0	68.0	18.0	36.0	26.0	80.0	53.0	58.0	75.0	59.0	79.0	54.5	
EFFLUENT (MG/L)	ND	ND	ND	27.0	10.7	ND	ND	ND	ND	ND	2.0	18.7	14.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	31.59	9.63	ND	ND	ND	ND	ND	2.58	17.20	13.58	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	72.0	78.0	53.0	45.0	85.0	52.0	146.0	49.0	71.0	67.0	106.0	92.0	76.3	
EFFLUENT (MG/L)	ND	ND	ND	6.1	23.2	ND	ND	ND	ND	ND	27.0	19.7	19.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	7.13	20.88	ND	ND	ND	ND	ND	34.83	18.12	17.67	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.4	5.0	5.9	2.1	3.4	2.9	5.6	3.5	3.8	4.8	3.8	3.9	4.0	
EFFLUENT (MG/L)	ND	ND	ND	1.7	1.3	ND	ND	ND	ND	ND	0.3	3.5	1.7	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	1.98	1.17	ND	ND	ND	ND	ND	0.38	3.22	1.58	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WELLINGTON
 PLANT : WELLINGTON WPCP
 WORKS NUMBER : 120003165
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.50 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : PRINCE EDWARD
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE ONTARIO
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,077

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.42	0.42	0.59	0.94	0.74	0.60	0.42	0.37	0.34	0.40	0.64	0.54	0.54	
BOD5														
INFLUENT (MG/L)	135.0	145.0	108.0	42.0	72.0	70.0	255.0	112.0	255.0	215.0	130.0	88.0	135.6	
EFFLUENT (MG/L)	1.0	3.0	8.0	4.0	2.0	4.0	2.0	3.0	2.0	1.6	2.0	2.0	2.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.42	1.26	4.72	3.76	1.48	2.40	0.84	1.11	0.68	0.64	1.28	1.08	1.57	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	100.0	106.0	125.0	128.0	59.0	68.0	266.0	136.0	185.0	122.0	78.0	68.0	120.1	
EFFLUENT (MG/L)	3.0	9.0	21.0	18.0	9.0	2.0	4.0	11.0	4.0	7.8	5.0	11.0	8.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.26	3.78	12.39	16.92	6.66	1.20	1.68	4.07	1.36	3.12	3.20	5.94	4.70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	15.1	6.1	7.1	2.6	5.4	8.9	11.4	9.6	16.7	9.1	7.4	5.4	8.7	
EFFLUENT (MG/L)	1.2*	0.8	1.8*	0.5	0.9	0.5	0.5	0.7	0.7	0.6	0.7	0.7	0.8	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.50	0.33	1.06	0.47	0.66	0.30	0.21	0.25	0.23	0.24	0.44	0.37	0.43	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - OPERATIONAL PROCEDURES BEING UPGRADED
 OPERATIONAL/PROCESS - MONITORING PROCEDURES BEING UPGRADED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989	1989/06	1990
1989	1989/06	1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WESTPORT
 PLANT : WESTPORT LAGOON
 WORKS NUMBER : 110001550
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.24 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : LEEDS AND GRENVILLE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : UPPER RIDEAU LAKE
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 566

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.24	0.23	0.25	0.30	0.34	0.32	0.28	0.26	0.24	0.26	0.31	0.26	0.27	
LAGOON DISCHARGE	ND	ND	ND	ND	52.46	ND	ND	ND	ND	ND	47.68	ND	50.07	
BOD5														
INFLUENT (MG/L)	79.0	141.0	116.0	85.0	99.0	73.0	94.0	137.0	120.0	133.0	73.0	58.0	100.7	
EFFLUENT (MG/L)	ND	ND	ND	14.7	10.0	ND	ND	ND	ND	ND	9.4	ND	11.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	4.41	3.40	ND	ND	ND	ND	ND	2.91	ND	3.08	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	108.0	190.0	241.0	85.0	127.0	87.0	89.0	115.0	82.0	115.0	80.0	46.0	113.8	
EFFLUENT (MG/L)	ND	ND	ND	28.0	15.7	ND	ND	ND	ND	ND	15.4	ND	19.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	8.40	5.33	ND	ND	ND	ND	ND	4.77	ND	5.32	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.1	7.3	6.3	4.8	8.7	6.0	4.9	7.3	6.1	6.7	5.6	4.4	6.1	
EFFLUENT (MG/L)	ND	ND	ND	1.7*	0.3	ND	ND	ND	ND	ND	0.6	ND	0.9	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.51	0.10	ND	ND	ND	ND	ND	0.18	ND	0.24	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WILLIAMSBURG TWP
 PLANT : WILLIAMSBURG PV LAGOON
 WORKS NUMBER : 120002013
 TREATMENT : CONVENTIONAL LAGOON ANNUAL
 :
 :
 DESIGN CAPACITY : 1.22 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : STORMONT, DUNDAS AND GLENGARRY
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : MCHARTIN DRAIN
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 300

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.30	0.36	0.38	0.49	0.56	0.65	0.45	0.35	0.31	0.41	0.63	0.44	0.44	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	180.0	88.0	230.0	60.0	102.0	68.0	65.0	84.0	135.0	145.0	90.0	66.0	109.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	124.0	85.0	113.0	77.0	115.0	76.0	66.0	82.0	77.0	84.0	51.0	48.0	83.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.9	8.0	7.1	5.6	5.7	3.9	5.7	6.6	6.2	8.9	5.2	3.3	6.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	NO DISCHARGE
SS	40.0 MG/L	NO DISCHARGE
TP	NA	NO DISCHARGE

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WINCHESTER
 PLANT : WINCHESTER LAGOON
 WORKS NUMBER : 110001202
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 :
 DESIGN CAPACITY : 1.72 (1000 M3)

REGION : SOUTHEAST
 DISTRICT : STORMONT, DUNDAS AND GLENGARRY
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : CASTOR RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,200

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.03	1.01	1.18	1.48	1.75	1.66	1.43	1.63	1.07	1.22	1.69	1.11	1.36	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	210.0	160.0	157.0	123.0	114.5	44.0	61.0	97.0	75.0	56.0	66.0	83.0	103.9	
EFFLUENT (MG/L)	ND	ND	ND	34.3	ND	ND	ND	ND	ND	ND	0.8	ND	17.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	50.76	ND	ND	ND	ND	ND	ND	1.35	ND	23.94	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	226.0	155.0	168.0	920.0	867.5	81.0	106.0	118.0	71.0	40.0	78.0	56.0	240.5	
EFFLUENT (MG/L)	ND	ND	ND	24.0	ND	ND	ND	ND	ND	ND	14.0	ND	19.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	35.52	ND	ND	ND	ND	ND	ND	23.66	ND	25.84	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.8	7.7	9.1	8.0	7.4	ND	5.9	7.2	6.0	6.8	4.9	6.1	7.1	
EFFLUENT (MG/L)	ND	ND	ND	5.6	ND	ND	ND	ND	ND	ND	0.8	ND	3.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	8.28	ND	ND	ND	ND	ND	ND	1.35	ND	4.35	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

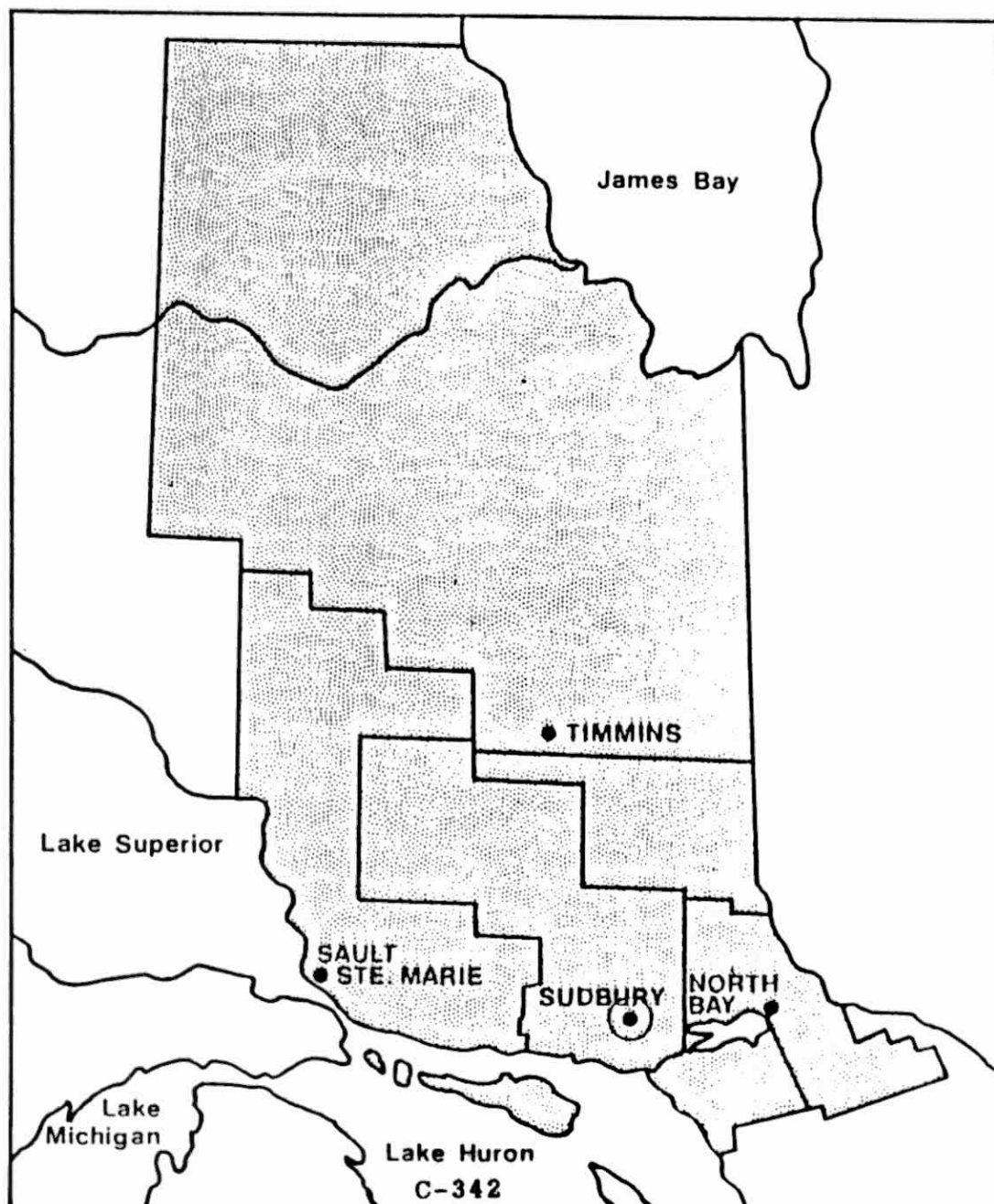
Northeastern Region

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Ontario

Ministry
of the
Environment



Northeastern Region

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REGIONAL OFFICE

Sudbury
199 Larch St.
P3E 5P9
(705) 675-4501

DISTRICT OFFICES

North Bay
1500 Fisher St.
P1B 2H3
(705) 476-1001

Sault Ste. Marie
445 Albert St. East
P6A 2J9
(705) 949-4640

Sudbury
199 Larch St.
P3E 5P9
(705) 675-4501

Timmins
83 Algonquin Blvd. West
P4N 2R4
(705) 268-3222

SUB-OFFICE

Parry Sound
74 Church St.
P2A 1Z1
(705) 746-2139

NORTHEAST SUMMARY - 1989

Treatment Type	Number			Design Capacity (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Primary	2	1	3	57.55	34.09	91.64
Conventional Activated Sludge	4	4	8	65.69	25.44	91.13
Contact Stabilization	3	1	4	18.24	6.82	25.06
Extended Aeration	10	7	17	20.43	18.95	39.38
Trickling Filter	0	1	1	-	0.91	0.91
High Rate	0	1	1	-	68.19	68.19
Oxidation Ditch	0	1	1	-	3.00	3.00
Communal Septic Tank	0	1	1			
Aerated Lagoon	1	0	1	4.55	-	4.55
Convent. Lagoon Continuous	4	2	6	1.23	-	1.23
Conventional Lagoon Seasonal	23	9	32	14.42	57.31	71.73
Aerated Cell Plus Lagoon	2	1	3	12.32	0.39	12.71
Exfiltration Lagoon	2	2	4	1.68	1.54	3.23
TOTALS	51	31	82	196.11	216.64	412.75

1000M3/D: Thousands of cubic meters per day

ADF: Average Daily Flow

NORTHEAST SUMMARY – 1989

Treatment Type	Number			Annual ADF (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Primary	2	1	3	35.60	20.36	55.96
Conventional Activated Sludge	4	4	8	49.27	15.22	64.49
Contact Stabilization	3	1	4	15.61	4.07	19.68
Extended Aeration	10	7	17	28.64	15.79	44.43
Trickling Filter	0	1	1	0.00	0.77	0.77
High Rate	0	1	1	0.00	60.42	60.42
Oxidation Ditch	0	1	1	0.00	1.59	1.59
Communal Septic Tank	0	1	1	0.00	0.00	0.00
Aerated Lagoon	1	0	1	2.90	0.00	2.90
Convent. Lagoon Continuous	4	2	6	1.93	0.00	1.93
Conventional Lagoon Seasonal	23	9	32	13.43	3.01	16.44
Aerated Cell Plus Lagoon	2	1	3	6.87	0.26	7.13
Exfiltration Lagoon	2	2	4	1.79	3.06	4.85
TOTALS	51	31	32	156.04	124.55	280.59

1000M3/D: Thousands of cubic meters per day
ADF: Average Daily Flow

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ARMSTRONG
 PLANT : EARLTON LAGOON
 WORKS NUMBER : 120000042
 TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
 :
 :
 :
 DESIGN CAPACITY : 0.36 (1000 M3)

REGION : NORTHEAST
 DISTRICT : TIMISKAMING
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : EVANTUREL CREEK
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,452

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	16.00	ND	ND	ND	16.00	
BOD5														
INFLUENT (MG/L)	ND	121.0	ND	ND	58.0	120.0	145.0	160.0	145.0	ND	205.0	95.0	131.1	
EFFLUENT (MG/L)	ND	30.0	ND	ND	32.0	16.0	16.0	28.0	12.0	ND	12.0	24.0	21.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	140.0	ND	ND	80.0	110.0	50.0	140.0	50.0	ND	25.0	130.0	90.6	
EFFLUENT (MG/L)	ND	20.0	ND	ND	40.0	10.0	30.0	30.0	7.2	ND	20.1	40.0	24.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	7.6	ND	ND	7.4	7.2	7.2	7.4	7.2	ND	7.1	760.0	101.4	
EFFLUENT (MG/L)	ND	7.0	ND	ND	7.2	7.1	7.2	8.5	7.3	ND	8.0	7.3	7.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	INSUFFICIENT DATA
SS	40.0 MG/L	INSUFFICIENT DATA
TP	NA	INSUFFICIENT DATA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ASSIGINACK
 PLANT : MANITOWANING LAGOON
 WORKS NUMBER : 110001408
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 DESIGN CAPACITY : 0.25 (1000 M3)

REGION : NORTHEAST
 DISTRICT : MANITOULIN
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE HURON
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 440

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.28	0.25	0.42	0.42	0.23	0.21	0.24	0.23	0.18	0.18	0.25	0.19	0.26	
LAGOON DISCHARGE	ND	ND	ND	28.33	ND	ND	ND	ND	ND	ND	27.28	ND	27.81	
BOD5														
INFLUENT (MG/L)	165.0	78.0	210.0	45.0	18.0	42.0	64.0	7.0	46.0	32.0	34.0	160.0	75.1	
EFFLUENT (MG/L)	ND	ND	ND	15.2	ND	ND	ND	ND	ND	ND	18.9	ND	17.1	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	6.38	ND	ND	ND	ND	ND	ND	4.72	ND	4.45	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	120.0	75.0	200.0	65.0	25.0	80.0	35.0	20.0	30.0	25.0	30.0	200.0	75.4	
EFFLUENT (MG/L)	ND	ND	ND	40.4	ND	ND	ND	ND	ND	ND	26.0	ND	33.2	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	16.96	ND	ND	ND	ND	ND	ND	6.50	ND	8.63	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.0	4.2	7.6	2.5	1.5	1.7	4.0	1.4	2.9	2.7	2.8	10.4	3.8	
EFFLUENT (MG/L)	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	2.2	ND	2.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	1.17	ND	ND	ND	ND	ND	ND	0.55	ND	0.65	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BLACK RIVER MATHESON
 PLANT : MATHESON WPCP
 WORKS NUMBER : 110000025
 TREATMENT : EXTENDED AERATION
 :
 :
 DESIGN CAPACITY : 1.04 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BLACK RIVER
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 920

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.35	0.36	0.51	1.03	0.91	0.63	0.45	0.52	0.41	0.51	0.60	0.35	0.55	
<u>BOD5</u>														
INFLUENT (MG/L)	95.0	145.0	66.0	60.0	44.0	47.0	77.0	61.3	66.5	65.0	74.0	124.0	77.1	
EFFLUENT (MG/L)	5.7	8.0	7.7	3.9	6.7	12.7	3.4	5.1	9.8	10.6	4.1	6.0	7.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.99	2.88	3.92	4.01	6.09	8.00	1.53	2.65	4.01	5.40	2.46	2.10	3.85	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	110.0	155.0	75.0	90.0	78.0	69.0	48.5	53.3	50.0	93.0	93.0	120.0	86.2	
EFFLUENT (MG/L)	9.5	7.0	5.5	5.5	4.0	4.2	5.3	4.7	6.0	8.5	8.5	9.5	6.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.32	2.52	2.80	5.66	3.64	2.64	2.38	2.44	2.46	4.33	5.10	3.32	3.58	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	5.6	5.5	4.6	4.1	2.7	4.4	5.4	4.6	3.3	4.1	3.3	5.0	4.4	
EFFLUENT (MG/L)	2.7	3.2	1.9	1.2	1.5	1.8	2.1	2.1	2.3	2.1	1.5	2.2	2.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.94	1.15	0.96	1.23	1.36	1.13	0.94	1.09	0.94	1.07	0.90	0.77	1.16	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BLACK RIVER MATHESON
 PLANT : RAMORE LAGOON
 WORKS NUMBER : 110001104
 TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
 :
 :
 DESIGN CAPACITY : 0.12 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BLACK RIVER
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 320

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.10	0.09	0.11	0.25	0.22	0.16	0.14	0.18	0.10	0.14	0.15	0.10	0.15	
LAGOON DISCHARGE	3.06	2.59	3.31	27.25	0.69	ND	ND		0.21	0.34	ND	1.51	4.33	
BOD5														
INFLUENT (MG/L)	127.5	270.0	53.0	69.0	46.0	123.0	89.0	109.3	95.0	65.0	51.0	149.0	103.9	
EFFLUENT (MG/L)	18.0	22.0	23.0	14.5	ND	ND	12.8	9.7	20.0	ND	ND	40.0	20.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	1.80	1.98	2.53	3.62	ND	ND	1.79	1.74	2.00	ND	ND	4.00	3.00	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	162.5	390.0	80.0	65.0	70.0	101.0	54.0	75.0	90.0	88.0	78.0	115.0	114.0	
EFFLUENT (MG/L)	7.0	8.5	15.0	16.8	ND	ND	29.0	18.3	37.5	ND	ND	30.0	20.3	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	0.70	0.76	1.65	4.20	ND	ND	4.06	3.29	3.75	ND	ND	3.00	3.05	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.5	12.8	8.9	3.3	3.0	5.1	5.5	5.7	9.3	3.8	5.1	6.6	6.3	
EFFLUENT (MG/L)	3.9	4.5	4.0	2.7	ND	ND	1.6	1.6	1.7	ND	ND	3.0	2.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.39	0.40	0.44	0.67	ND	ND	0.22	0.28	0.17	ND	ND	0.30	0.44	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	INSUFFICIENT DATA
SS	40.0 MG/L	INSUFFICIENT DATA
TP	NA	INSUFFICIENT DATA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED

START DATE END DATE ANTICIPATED
 COMPLIANCE

1989/07

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BLACK RIVER MATHESON
 PLANT : VAL GAGNE LAGOON
 WORKS NUMBER : 120001559
 TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
 : SUMMER STORAGE
 :
 DESIGN CAPACITY : 0.12 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : CREEK TO BLACK RIVER
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 300

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	19.72	ND	ND	ND	ND	ND	ND	ND	ND	19.72	
BOD5														
INFLUENT (MG/L)	129.5	178.0	68.0	54.0	62.0	116.0	58.0	68.7	72.0	60.0	57.0	207.0	94.2	
EFFLUENT (MG/L)	26.0	42.5	25.5	11.3	ND	ND	ND	ND	ND	ND	ND	ND	26.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	145.0	190.0	120.0	75.0	100.0	96.0	72.0	65.0	60.0	88.0	110.0	228.0	112.4	
EFFLUENT (MG/L)	10.0	9.5	9.5	23.8	ND	ND	ND	ND	ND	ND	ND	ND	13.2	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.9	5.4	5.5	3.2	3.6	4.3	4.6	5.6	5.4	3.4	3.6	5.3	4.7	
EFFLUENT (MG/L)	3.9	4.6	4.0	1.4	ND	ND	ND	ND	ND	ND	ND	ND	3.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BLIND RIVER
 PLANT : BLIND RIVER WPCP
 WORKS NUMBER : 110002416
 TREATMENT : EXTENDED AERATION
 :
 :
 :
 DESIGN CAPACITY : 3.50 (1000 M3)

REGION : NORTHEAST
 DISTRICT : ALGOMA
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE HURON
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,200

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.63	1.58	2.01	1.94	1.67	2.03	1.61	1.64	1.61	1.47	1.57	1.33	1.67	
BOD5														
INFLUENT (MG/L)	106.0	116.0	94.0	41.0	ND	32.0	57.0	62.0	51.0	76.0	80.0	106.0	74.6	
EFFLUENT (MG/L)	1.2	2.7	1.9	4.0	ND	4.5	3.2	2.7	2.0	1.4	1.5	5.0	2.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.95	4.26	3.81	7.76	ND	9.13	5.15	4.42	3.22	2.05	2.35	6.65	4.51	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	109.0	100.0	114.0	56.0	116.0	181.0	62.0	44.0	105.0	109.0	127.0	295.0	118.2	
EFFLUENT (MG/L)	8.5	8.9	3.5	6.9	5.0	6.7	5.3	6.3	5.3	5.0	6.9	9.0	6.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	13.85	14.06	7.03	13.38	8.35	13.60	8.53	10.33	8.53	7.35	10.83	11.97	10.69	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.9	6.2	7.1	2.5	ND	ND	5.3	6.3	4.5	4.6	3.5	5.8	5.2	
EFFLUENT (MG/L)	2.3	2.8	3.2	7.0	ND	2.3	3.5	7.2	3.5	3.5	2.6	3.0	3.7	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	3.74	4.42	6.43	13.58	ND	4.66	5.63	11.80	5.63	5.14	4.08	3.99	6.18	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BRUCE MINES
 PLANT : BRUCE MINES LAGOON
 WORKS NUMBER : 110001756
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 DESIGN CAPACITY : 0.28 (1000 M3)

REGION : NORTHEAST
 DISTRICT : ALGOMA
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : ST. JOSEPH CHL. TO L. HURON
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 525

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.32	0.29	0.32	0.68	0.38	0.36	0.27	0.26	0.25	0.25	0.30	0.26	0.33	
LAGOON DISCHARGE	ND	ND	ND	ND	55.61	ND	ND	ND	ND	ND	41.40	ND	48.51	
BOD5														
INFLUENT (MG/L)	48.0	96.0	72.0	8.0	135.0	70.0	245.0	76.0	70.0	22.0	118.0	ND	87.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	14.0	ND	ND	ND	ND	ND	16.0	ND	15.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	5.32	ND	ND	ND	ND	ND	4.80	ND	4.95	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	55.0	60.0	35.0	10.0	120.0	30.0	170.0	40.0	38.0	15.0	180.0	ND	68.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	42.0	ND	ND	ND	ND	ND	5.5	ND	23.8	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	15.96	ND	ND	ND	ND	ND	1.65	ND	7.85	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.1	5.6	2.4	1.1	6.8	6.0	8.5	7.9	4.3	1.9	6.2	ND	4.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	1.5	ND	2.0	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.95	ND	ND	ND	ND	ND	0.45	ND	0.66	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

ANTICIPATED

REMEDIAL MEASURES

START DATE END DATE COMPLIANCE

FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BURK'S FALLS
 PLANT : BURKS FALLS LAGOON
 WORKS NUMBER : 110001426
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 DESIGN CAPACITY : 0.68 (1000 M3)

REGION : NORTHEAST
 DISTRICT : PARRY SOUND
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MAGNETAWAN RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.35	0.33	0.57	0.46	0.43	0.39	0.34	0.32	0.35	0.35	0.36	0.32	0.38	
LAGOON DISCHARGE	ND	ND	ND	64.80	32.40	ND	ND	ND	ND	ND	64.80	ND	54.00	
BOD5														
INFLUENT (MG/L)	91.0	150.0	245.0	45.0	43.0	60.0	75.0	98.0	80.0	89.0	176.0	171.0	110.3	
EFFLUENT (MG/L)	ND	ND	ND	12.0	15.0	ND	ND	ND	ND	ND	2.4	ND	9.8	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	5.52	6.45	ND	ND	ND	ND	ND	0.86	ND	3.72	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	120.0	150.0	470.0	88.0	75.0	90.0	75.0	78.0	73.0	103.0	18.0	102.0	120.2	
EFFLUENT (MG/L)	ND	ND	ND	17.5	15.0	ND	ND	ND	ND	ND	2.6	ND	11.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	8.05	6.45	ND	ND	ND	ND	ND	0.93	ND	4.45	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	7.1	10.0	4.5	4.0	5.8	6.8	6.0	6.0	6.0	75.0	5.0	11.9	
EFFLUENT (MG/L)	ND	ND	ND	4.0	3.8	ND	ND	ND	ND	ND	0.8	ND	2.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	1.84	1.63	ND	ND	ND	ND	ND	0.28	ND	1.10	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CALDWELL
 PLANT : VERNER LAGOON
 WORKS NUMBER : 110001872
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.47 (1000 M3)

REGION : NORTHEAST
 DISTRICT : NIPPISSING
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : VEUVE RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,116

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.43	0.38	0.56	0.57	0.62	0.56	0.47	0.43	0.38	0.40	0.52	0.44	0.48	
LAGOON DISCHARGE	ND	36.76	ND	6.66	19.28	51.29	14.50	13.28	5.59	36.07	ND	ND	22.93	
BOD5														
INFLUENT (MG/L)	61.0	53.0	101.0	53.0	47.0	73.0	112.0	80.0	146.0	143.0	119.0	93.0	90.1	
EFFLUENT (MG/L)	ND	18.2	ND	19.0	8.5	4.0	3.3	3.9	9.8	5.0	ND	ND	9.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	6.91	ND	10.83	5.27	2.24	1.55	1.67	3.72	2.00	ND	ND	4.32	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	105.0	88.0	128.0	135.0	74.0	146.0	75.0	77.5	57.5	125.0	110.0	133.0	104.5	
EFFLUENT (MG/L)	ND	15.2	ND	80.0	13.3	9.3	15.0	7.5	10.5	6.8	ND	ND	19.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	5.77	ND	45.60	8.24	5.20	7.05	3.22	3.99	2.72	ND	ND	9.46	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.4	3.0	7.4	1.8	5.3	3.7	3.4	6.3	3.3	6.2	4.5	3.9	4.4	
EFFLUENT (MG/L)	ND	1.0	ND	1.0	0.8	0.6	0.5	0.6	0.7	0.5	ND	ND	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	0.38	ND	0.57	0.49	0.33	0.23	0.25	0.26	0.20	ND	ND	0.34	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CAPREOL
 PLANT : CAPREOL LAGOON
 WORKS NUMBER : 120001210
 TREATMENT : EXFILTRATION LAGOON
 :
 :
 DESIGN CAPACITY : 1.54 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : NO DISC TO SURFACE WATER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,352

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.72	3.23	0.66	3.63	3.75	5.41	ND	2.70	2.85	2.55	2.46	2.67	3.06	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
<u>BOD5</u>														
INFLUENT (MG/L)	ND	ND	ND	ND	120.0	48.0	ND	ND	82.0	122.0	ND	ND	93.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	6.8	22.0	ND	ND	13.0	12.0	14.0	ND	13.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	25.50	119.02	ND	ND	37.05	30.60	34.44	ND	41.62	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	ND	ND	ND	ND	95.0	15.0	ND	ND	35.0	170.0	ND	ND	78.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	25.0	70.0	ND	ND	8.0	15.0	20.0	ND	27.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	93.75	378.70	ND	ND	22.80	38.25	49.20	ND	84.46	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	ND	ND	ND	ND	5.0	2.2	ND	ND	3.5	6.1	ND	ND	4.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	1.5	2.6	ND	ND	1.6	2.1	2.5	ND	2.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	5.62	14.06	ND	ND	4.56	5.35	6.15	ND	6.43	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:

BOD - HAS NO CRITERIA
 SS - HAS NO CRITERIA
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CASEY
 PLANT : BELLE VALLEE LAGOON
 WORKS NUMBER : 120001808
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 DESIGN CAPACITY : 0.12 (1000 M3)

REGION : NORTHEAST
 DISTRICT : TIMISKAMING
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : BLANCHE RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED :

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	470.0	550.0	470.0	480.0	170.0	170.0	200.0	ND	88.0	210.0	170.0	310.0	298.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	65.0	90.0	130.0	95.0	100.0	50.0	40.0	ND	65.0	270.0	85.0	220.0	110.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	28.0	16.0	31.5	11.8	12.0	11.3	15.4	ND	5.5	11.8	12.8	30.0	16.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	NO DISCHARGE
SS	40.0 MG/L	NO DISCHARGE
TP	NA	NO DISCHARGE

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CASIMIR J.A.
 PLANT : ST.CHARLES LAGOON
 WORKS NUMBER : 110002256
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.54 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY DIST.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MCPHERSON CREEK W.BRANCH
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 280

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.19	0.12	0.58	0.94	0.45	0.38	0.22	0.20	0.16	0.14	0.15	0.14	0.31	
LAGOON DISCHARGE	ND	ND	ND	51.50	ND	ND	ND	ND	ND	ND	ND	ND	51.50	
BOD5														
INFLUENT (MG/L)	ND	150.0	140.0	35.0	69.0	113.0	177.0	ND	110.0	104.0	94.0	263.0	125.5	
EFFLUENT (MG/L)	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	1.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	1.12	ND	ND	ND	ND	ND	ND	ND	ND	0.37	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	120.0	130.0	40.0	62.0	73.0	95.0	ND	62.0	83.0	115.0	160.0	94.0	
EFFLUENT (MG/L)	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	ND	5.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	5.07	ND	ND	ND	ND	ND	ND	ND	ND	1.67	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	7.6	7.7	2.1	4.1	6.1	7.1	ND	5.8	5.7	4.8	8.7	6.0	
EFFLUENT (MG/L)	ND	ND	ND	1.1*	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	ND	ND	ND	1.03	ND	ND	ND	ND	ND	ND	ND	ND	0.34	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

EQUIPMENT/MAINTENANCE - EXISTING EQUIPMENT BEING REPAIRED

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989/04	1989/04	
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CHAPLEAU
 PLANT : CHAPLEAU LAGOON
 WORKS NUMBER : 110002149
 TREATMENT : AERATED LAGOON
 : CONTINUOUS DISCHARGE
 : SERIES OPERATION
 DESIGN CAPACITY : 4.54 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY DIST.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : NEBSKWASH
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 2,450

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.53	3.22	3.52	3.88	4.26	3.01	2.43	2.28	2.11	2.14	2.45	2.91	2.90	
LAGOON DISCHARGE	78.34	90.02	109.27	116.31	80.84	90.31	75.46	70.77	63.17	66.40	73.59	90.08	83.71	
BOD5														
INFLUENT (MG/L)	32.5	70.0	149.0	39.0	45.0	69.0	52.0	68.0	50.0	135.0	124.0	32.0	72.1	
EFFLUENT (MG/L)	31.5	25.0	9.0	11.2	27.5	18.0	21.0	7.9	18.0	21.0	13.8	22.5	18.9	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	79.69	80.50	31.68	43.45	117.15	54.18	51.03	18.01	37.98	44.94	33.81	65.47	54.81	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	47.5	160.0	167.0	57.0	90.0	125.0	290.0	142.5	58.0	139.0	145.0	30.0	120.9	
EFFLUENT (MG/L)	72.5	15.0	17.5	12.5	37.5	20.0	30.0	22.5	37.5	42.5	22.5	17.5	29.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	183.42	48.30	61.60	48.50	159.75	60.20	72.90	51.30	79.12	90.95	55.12	50.92	84.10	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.1	2.0	2.8	2.4	1.9	1.6	1.7	1.6	2.5	3.5	2.9	1.7	2.2	
EFFLUENT (MG/L)	1.8	1.3	1.3	0.8	1.1	0.6	0.7	0.7	1.0	1.1	1.3	1.4	1.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	4.55	4.18	4.57	3.10	4.68	1.80	1.70	1.59	2.11	2.35	3.18	4.07	3.19	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COCHRANE
 PLANT : COCHRANE WPCP
 WORKS NUMBER : 120000355
 TREATMENT : EXTENDED AERATION
 : EFFLUENT POLISHING
 :
 DESIGN CAPACITY : 3.41 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LILLABELLE LAKE
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 4,600

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.66	2.64	2.88	4.07	3.82	2.60	2.74	2.70	2.88	ND	5.27	3.69	3.27	
BOD5														
INFLUENT (MG/L)	ND	92.0	73.0	88.0	48.0	69.0	95.0	ND	ND	89.0	ND	150.0	88.0	
EFFLUENT (MG/L)	ND	80.0	95.5	58.0	47.0	27.8	15.0	ND	ND	33.5	ND	113.0	58.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	211.20	275.04	236.06	179.54	72.28	41.10	ND	ND	ND	ND	416.97	191.95	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	130.0	100.0	115.0	85.0	98.0	75.0	ND	ND	205.0	ND	190.0	124.8	
EFFLUENT (MG/L)	ND	360.0	272.5	135.0	95.0	42.5	65.0	ND	ND	102.5	ND	220.0	161.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	950.40	784.80	549.45	362.90	110.50	178.10	ND	ND	ND	ND	811.80	528.43	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	4.7	4.1	3.8	3.0	4.6	5.4	ND	ND	5.8	ND	5.8	4.7	
EFFLUENT (MG/L)	ND	7.8	5.3	3.3	1.9	3.1	2.9	ND	ND	6.5	ND	3.9	4.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	20.59	15.26	13.43	7.25	8.06	7.94	ND	ND	ND	ND	14.39	14.06	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	INSUFFICIENT DATA
SS	25.0 MG/L	INSUFFICIENT DATA
TP	NA	INSUFFICIENT DATA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW
 COLLECTION SYSTEM - SEWAGE UPGRADE UNDERWAY

START DATE	END DATE	ANTICIPATED COMPLIANCE
1991	1992	
1991	1992	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COSBY M.M.
 PLANT : NOELVILLE LAGOON
 WORKS NUMBER : 110002425
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 DESIGN CAPACITY : 0.79 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY DIST.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : WOLF RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 551

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.23	0.24	0.37	0.28	0.37	0.30	0.20	0.18	0.17	0.16	0.18	0.19	0.24	
LAGOON DISCHARGE	ND	ND	ND	70.50	ND	ND	ND	ND	ND	ND	ND	ND	70.50	
BOD5														
INFLUENT (MG/L)	196.0	208.0	46.0	129.0	108.0	90.0	137.0	170.0	175.0	141.0	142.0	233.0	147.9	
EFFLUENT (MG/L)	ND	ND	ND	7.3	ND	ND	ND	ND	ND	ND	ND	ND	7.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	2.04	ND	ND	ND	ND	ND	ND	ND	ND	1.75	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	130.0	320.0	111.0	185.0	193.0	275.0	108.0	115.0	332.0	155.0	210.0	185.0	193.3	
EFFLUENT (MG/L)	ND	ND	ND	20.0	ND	ND	ND	ND	ND	ND	ND	ND	20.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	5.60	ND	ND	ND	ND	ND	ND	ND	ND	4.80	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.7	9.5	3.5	7.1	5.0	4.5	5.6	6.8	7.3	7.2	6.2	10.0	6.5	
EFFLUENT (MG/L)	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	1.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	0.39	ND	ND	ND	ND	ND	ND	ND	ND	0.34	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DUBREUILVILLE
 PLANT : DUBREUILVILLE LAGOON IN OP.1987
 WORKS NUMBER : 110001970
 TREATMENT : EXFILTRATION LAGOON
 :
 :
 DESIGN CAPACITY : 0.59 (1000 M3)

REGION : NORTHEAST
 DISTRICT : ALGOMA
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : NO DISC.TO SURFACE WATER
 MINOR BASIN : SUPERIOR
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.37	0.36	0.39	0.40	0.35	0.35	0.29	0.33	0.31	0.36	0.38	0.36	0.35	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	220.0	425.0	94.0	35.0	40.0	55.0	160.0	18.0	321.0	ND	ND	ND	152.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	120.0	480.0	97.0	35.0	20.0	75.0	70.0	25.0	942.0	ND	ND	ND	207.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.5	6.3	7.3	4.6	4.7	5.2	10.4	8.6	7.2	ND	ND	ND	6.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:

BOD - HAS NO CRITERIA
 SS - HAS NO CRITERIA
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ELLIOT LAKE
 PLANT : ESTEN LAKE WPCP
 WORKS NUMBER : 120001121
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 13.00 (1000 M3)

REGION : NORTHEAST
 DISTRICT : ALGOMA
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : ESTEN LAKE
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 19,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	6.19	11.34	7.21	ND	6.70	6.80	6.04	5.84	6.41	5.14	6.85	
BOD5														
INFLUENT (MG/L)	ND	ND	38.0	29.0	54.0	ND	42.0	44.0	80.0	96.0	56.0	82.0	57.9	
EFFLUENT (MG/L)	ND	ND	6.6	4.4	8.0	ND	39.0	29.0	22.1	740.0	23.0	6.5	97.6*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	40.85	49.89	57.68	ND	261.30	197.20	133.48	4321.60	147.43	33.41	668.56	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	86.0	37.0	49.0	ND	43.0	62.0	112.0	114.0	106.0	95.0	78.2	
EFFLUENT (MG/L)	ND	ND	18.0	10.0	9.0	ND	5.0	13.3	17.4	12.2	10.4	18.0	12.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	111.42	113.40	64.89	ND	33.50	90.44	105.09	71.24	66.66	92.52	86.31	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	4.0	2.6	3.4	ND	2.9	3.5	4.3	3.5	2.9	3.4	3.4	
EFFLUENT (MG/L)	ND	ND	0.9	0.6	0.9	ND	0.5	0.8	1.0	0.8	0.6	0.9	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	ND	ND	5.57	6.80	6.48	ND	3.35	5.44	6.04	4.67	3.84	4.62	5.48	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ENGLEHART
 PLANT : ENGLEHART LAGOON
 WORKS NUMBER : 110000187
 TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.90 (1000 M3)

REGION : NORTHEAST
 DISTRICT : TIMISKAMING
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : ENGLEHART RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,730

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.16	1.16	1.44	3.40	2.91	2.86	1.70	1.15	1.21	1.26	1.64	1.17	1.76	
LAGOON DISCHARGE	35.80	32.54	44.70	101.78	90.20	85.80	52.00	43.86	36.36	39.10	49.24	49.20	55.05	
BOD5														
INFLUENT (MG/L)	149.0	138.0	84.0	45.0	31.0	50.0	58.0	67.0	84.0	83.0	73.0	148.0	84.2	
EFFLUENT (MG/L)	6.6	9.1	13.5	11.2	8.3	3.4	2.1	2.1	2.9	2.1	1.4	5.5	5.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	7.65	10.55	19.44	38.08	24.15	9.72	3.57	2.41	3.50	2.64	2.29	6.43	10.03	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	210.0	240.0	140.0	157.0	106.0	85.0	87.0	92.0	95.0	165.0	150.0	150.0	139.8	
EFFLUENT (MG/L)	35.0	32.5	32.5	27.5	26.3	14.5	12.5	3.6	2.5	3.5	4.3	2.0	16.4	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	40.60	37.70	46.80	93.50	76.53	41.47	21.25	4.14	3.02	4.41	7.05	2.34	28.86	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	30.4	6.1	4.1	1.8	1.9	2.5	3.5	ND	4.2	4.7	5.3	4.1	6.2	
EFFLUENT (MG/L)	0.6	1.1*	1.4*	0.9	0.2	0.2	0.5	0.5	0.9	0.5	0.2	0.3	0.6	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.69	1.27	2.01	3.06	0.58	0.57	0.85	0.57	1.08	0.63	0.32	0.35	1.06	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - MONITORING PROCEDURES BEING UPGRADED

START DATE END DATE ANTICIPATED
 COMPLIANCE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ESPANOLA
 PLANT : ESPANOLA WPCP
 WORKS NUMBER : 110000212
 TREATMENT : PRIMARY
 :
 :
 DESIGN CAPACITY : 3.00 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY DIST.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : SPANISH RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 5,200

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.66	2.64	2.96	2.72	2.63	2.80	2.66	2.62	2.77	2.64	2.79	2.65	2.71	
BOD5														
INFLUENT (MG/L)	82.0	90.0	93.0	60.0	61.0	54.0	89.0	59.0	51.0	60.0	68.0	125.0	74.3	
EFFLUENT (MG/L)	54.0	58.5	50.0	40.0	34.0	31.5	59.0	26.7	38.5	25.5	43.5	90.0	45.9	
LOADING (KG/D)	143.64	154.44	148.00	108.80	89.42	88.20	156.94	69.95	106.64	67.32	121.36	238.50	124.39	
PERCENT REMOVAL	34	35	46	33	44	42	34	55	25	58	36	28	38	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	110.0	120.0	100.0	105.0	130.0	68.0	73.0	60.0	37.0	73.0	95.0	130.0	91.8	
EFFLUENT (MG/L)	65.0	52.5	65.0	52.5	52.5	42.5	32.5	35.0	27.5	37.5	42.5	70.0	47.9	
LOADING (KG/D)	172.90	138.60	192.40	142.80	138.07	119.00	86.45	91.70	76.17	99.00	118.57	185.50	129.81	
PERCENT REMOVAL	41	56	35	50	60	38	55	42	26	49	55	46	48*	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.5	5.1	4.3	4.8	5.5	3.6	6.1	7.9	5.4	5.2	5.5	5.8	5.4	
EFFLUENT (MG/L)	5.5	5.0	5.3	4.5	6.6	5.7	5.2	5.2	4.4	4.4	ND	7.2	5.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	14.63	13.20	15.68	12.24	17.35	15.96	13.83	13.62	12.18	11.61	ND	19.08	14.63	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30%	YES
SS	50%	NO
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

SLUDGE DISPOSAL/REMOVAL - SLUDGE QUALITY BEING IMPROVED

ANTICIPATED
START DATE END DATE COMPLIANCE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : FAUQUIER-STRICKLAND
 PLANT : FAUQUIER LAGOON
 WORKS NUMBER : 110001792
 TREATMENT : CONVENTIONAL LAGOON SEASONAL

DESIGN CAPACITY : 0.27 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : GROUNDHOG RIVER
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 650

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	0.43	0.30	ND	ND	ND	0.37	
LAGOON DISCHARGE	ND	ND	ND	ND	48.60	ND	ND	ND	ND	ND	ND	ND	48.60	
BOD5														
INFLUENT (MG/L)	ND	440.0	190.0	48.0	ND	78.0	60.0	75.0	130.0	ND	ND	ND	145.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	5.9	ND	ND	ND	7.5	ND	ND	ND	6.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	2.25	ND	ND	ND	2.48	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	270.0	590.0	160.0	ND	80.0	75.0	110.0	70.0	ND	ND	ND	193.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	8.3	ND	ND	ND	25.0	ND	ND	ND	16.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	7.50	ND	ND	ND	6.18	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	5.0	4.1	3.4	ND	3.0	3.8	5.7	4.2	ND	ND	3.4	4.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.7	ND	ND	ND	0.4	ND	ND	ND	0.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	0.12	ND	ND	ND	0.22	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GORE BAY
 PLANT : GORE BAY LAGOON
 WORKS NUMBER : 110002513
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 DESIGN CAPACITY : 0.63 (1000 M3)

REGION : NORTHEAST
 DISTRICT : MANITOULIN
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE HURON
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 780

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.48	0.37	0.60	0.79	0.38	0.41	0.37	0.37	0.38	0.32	0.43	0.37	0.44	
LAGOON DISCHARGE	ND	ND	ND	ND	133.92	ND	ND	ND	ND	ND	33.48	ND	83.70	
BOD5														
INFLUENT (MG/L)	21.0	62.0	106.0	10.0	85.0	65.0	175.0	110.0	210.0	120.0	65.0	127.0	96.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	7.8	ND	ND	ND	ND	ND	4.1	ND	6.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	2.96	ND	ND	ND	ND	ND	1.76	ND	2.64	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	20.0	65.0	65.0	20.0	60.0	50.0	100.0	70.0	70.0	60.0	58.0	140.0	64.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	23.4	ND	ND	ND	ND	ND	0.1	ND	11.8	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	8.89	ND	ND	ND	ND	ND	0.04	ND	5.19	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.4	6.2	2.7	0.9	14.7	3.6	6.8	6.0	9.8	8.0	4.6	7.1	6.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	1.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.72	ND	ND	ND	ND	ND	ND	ND	0.84	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HAILEYBURY
 PLANT : LAKE TEMISKAMING NEW WPCP
 WORKS NUMBER : 110002158
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.60 (1000 M3)

REGION : NORTHEAST
 DISTRICT : TIMISKAMING
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE TEMISKAMING
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED :

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.38	1.32	1.55	1.87	1.68	1.75	1.24	1.33	1.33	1.28	1.50	1.41	1.47	
BOD5														
INFLUENT (MG/L)	59.0	9.0	98.0	51.0	24.0	74.0	64.0	26.0	89.0	153.0	70.0	26.0	61.9	
EFFLUENT (MG/L)	3.2	3.0	6.9	2.0	2.5	1.0	1.3	1.5	1.5	2.6	2.0	6.0	2.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.41	3.96	10.69	3.74	4.20	1.75	1.61	1.99	1.99	3.32	3.00	8.46	4.12	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	65.0	47.0	71.0	77.0	83.0	131.0	71.7	45.0	84.0	67.0	72.0	93.0	75.6	
EFFLUENT (MG/L)	12.4	14.4	28.0	11.4	14.2	6.8	12.3	7.0	4.6	15.0	10.2	6.5	11.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	17.11	19.00	43.40	21.31	23.85	11.90	15.25	9.31	6.11	19.20	15.30	9.16	17.49	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.8	1.6	2.0	2.4	3.2	3.4	ND	2.1	2.3	ND	6.1	2.2	2.9	
EFFLUENT (MG/L)	0.2	0.3	1.2*	0.2	0.1	0.1	0.2	0.3	0.2	0.2	0.3	0.1	0.3	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.27	0.39	1.86	0.37	0.16	0.17	0.24	0.39	0.26	0.25	0.45	0.14	0.44	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - SAMPLING PROGRAM BEING MODIFIED

START DATE END DATE ANTICIPATED
 COMPLIANCE

1990/01

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : HAILEYBURY
 PLANT : LAKE TEMISKAMING OLD WPCP
 WORKS NUMBER : 110000310
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.59 (1000 M3)

REGION : NORTHEAST
 DISTRICT : TIMISKAMING
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE TIMISKAMING
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,240

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.31	1.26	1.54	2.19	2.07	2.02	1.50	1.54	1.46	1.39	1.62	1.37	1.61	
BOD5														
INFLUENT (MG/L)	ND	70.0	98.0	51.0	24.0	74.0	64.0	26.0	89.0	153.0	70.0	26.0	67.7	
EFFLUENT (MG/L)	ND	3.4	6.9	1.6	1.7	9.0	2.4	1.3	1.7	0.8	3.0	4.2	3.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	4.28	10.62	3.50	3.51	18.18	3.60	2.00	2.48	1.11	4.86	5.75	5.31	
LOADING LIMIT (KG/D)													68.20	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	81.0	60.0	71.0	77.0	83.0	131.0	61.0	60.0	83.0	67.0	72.0	93.0	78.3	
EFFLUENT (MG/L)	11.3	5.5	28.7	11.7	13.0	6.0	6.6	7.7	5.5	8.5	7.8	11.8	10.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	14.80	6.93	44.19	25.62	26.91	12.12	9.90	11.85	8.03	11.81	12.63	16.16	16.58	
LOADING LIMIT (KG/D)													68.20	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	4.7	2.0	2.4	3.2	4.8	3.8	2.1	2.3	ND	6.1	1.4	3.3	
EFFLUENT (MG/L)	0.1	0.3	1.1	0.2	0.1	0.2	0.6	0.2	0.1	0.2	0.8	0.3	0.4	
CONCENTRATION LIMIT (MG/L)													1.0	
LOADING (KG/D)	0.13	0.37	1.69	0.43	0.20	0.40	0.90	0.30	0.14	0.27	1.29	0.41	0.64	
LOADING LIMIT (KG/D)													2.70	

SUMMARY

PARAM	CRITERIA	LOADING	COMPLIES WITH CONC	LOADING
BOD	25.0 MG/L	68.20 KG/D	YES	YES
SS	25.0 MG/L	68.20 KG/D	YES	YES
TP	1.0 MG/L	2.70 KG/D	YES	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - SAMPLING PROGRAM BEING MODIFIED

START DATE END DATE ANTICIPATED
 COMPLIANCE

1990/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HAILEYBURY
 PLANT : LAKE TEMISKAMING OLD WPCP
 WORKS NUMBER : 110000310
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 1.59 (1000 M3)

REGION : NORTHEAST
 DISTRICT : TIMISKAMING
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE TIMISKAMING
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,240

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.31	1.26	1.54	2.19	2.07	2.02	1.50	1.54	1.46	1.39	1.62	1.37	1.61	
BOD5														
INFLUENT (MG/L)	ND	70.0	98.0	51.0	24.0	74.0	64.0	26.0	89.0	153.0	70.0	26.0	67.7	
EFFLUENT (MG/L)	ND	3.4	6.9	1.6	1.7	9.0	2.4	1.3	1.7	0.8	3.0	4.2	3.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	4.28	10.62	3.50	3.51	18.18	3.60	2.00	2.48	1.11	4.86	5.75	5.31	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	81.0	60.0	71.0	77.0	83.0	131.0	61.0	60.0	83.0	67.0	72.0	93.0	78.3	
EFFLUENT (MG/L)	11.3	5.5	28.7	11.7	13.0	6.0	6.6	7.7	5.5	8.5	7.8	11.8	10.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	14.80	6.93	44.19	25.62	26.91	12.12	9.90	11.85	8.03	11.81	12.63	16.16	16.58	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	4.7	2.0	2.4	3.2	4.8	3.8	2.1	2.3	ND	6.1	1.4	3.3	
EFFLUENT (MG/L)	0.1	0.3	1.1*	0.2	0.1	0.2	0.6	0.2	0.1	0.2	0.8	0.3	0.4	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.13	0.37	1.69	0.43	0.20	0.40	0.90	0.30	0.14	0.27	1.29	0.41	0.64	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - SAMPLING PROGRAM BEING MODIFIED

START DATE END DATE ANTICIPATED
 COMPLIANCE

1990/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HAILEYBURY
 PLANT : NORTH COBALT LAGOON
 WORKS NUMBER : 110001382
 TREATMENT : AERATED CELL PLUS LAGOON
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 0.34 (1000 M3)

REGION : NORTHEAST
 DISTRICT : TIMISKAMING
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : FARR CREEK
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.31	0.32	0.49	0.85	0.90	0.73	0.36	0.40	0.45	ND	0.51	0.30	0.51	
LAGOON DISCHARGE	9.59	8.94	15.23	25.34	59.28	ND	2.82	12.29	13.55	ND	ND	ND	18.38	
BOD5														
INFLUENT (MG/L)	119.0	120.5	126.5	69.0	41.0	107.0	107.0	90.0	143.0	ND	82.0	135.0	103.6	
EFFLUENT (MG/L)	ND	ND	57.0	15.8	17.4	ND	13.0	11.0	15.0	ND	ND	ND	21.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	27.93	13.43	15.66	ND	4.68	4.40	6.75	ND	ND	ND	10.97	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	105.0	97.5	155.0	130.0	93.0	29.0	47.0	95.0	87.0	ND	65.0	135.0	94.4	
EFFLUENT (MG/L)	ND	ND	15.0	67.5	18.8	ND	20.0	15.0	42.5	ND	ND	ND	29.8	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	7.35	57.37	16.92	ND	7.20	6.00	19.12	ND	ND	ND	15.20	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.0	6.7	8.8	4.1	3.1	3.7	6.2	5.2	6.7	ND	3.1	4.3	5.2	
EFFLUENT (MG/L)	ND	ND	5.7*	1.5*	2.1*	ND	0.8	2.1*	2.0*	ND	ND	ND	2.4	5
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	2.79	1.27	1.89	ND	0.28	0.84	0.90	ND	ND	ND	1.22	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HALLEBOURG
 PLANT : HALLEBOURG LAGOON
 WORKS NUMBER : 120002031
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 24.00 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LAKE MCILWROTH
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 260

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	8.28	ND	ND	ND	ND	8.28	ND	ND	8.28	
BOD5														
INFLUENT (MG/L)	315.0	275.0	255.0	260.0	255.0	140.0	265.0	170.0	220.0	ND	ND	155.0	231.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	6.8	ND	ND	ND	ND	1.3	ND	ND	4.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	260.0	340.0	250.0	230.0	180.0	150.0	100.0	220.0	230.0	ND	ND	130.0	209.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	3.0	ND	ND	ND	ND	4.0	ND	ND	3.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	12.0	13.0	13.0	8.4	11.4	5.7	8.3	11.8	7.3	ND	ND	9.2	10.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.5	ND	ND	ND	ND	0.8	ND	ND	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HEARST
 PLANT : CECILE TRAILER PARK LAGOON
 WORKS NUMBER : 120001997
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 :
 DESIGN CAPACITY : 0.07 (1000 M3) CONTINUOUS

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MATTAWISKIA
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 140

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.02	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	200.0	ND	64.0	70.0	96.0	130.0	ND	160.0	140.0	160.0	120.0	126.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	14.0	ND	ND	4.2	2.0	ND	ND	6.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	0.28	ND	ND	0.04	0.04	ND	ND	0.13	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	100.0	ND	55.0	60.0	85.0	65.0	ND	85.0	120.0	150.0	60.0	86.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	15.0	ND	ND	10.0	20.0	ND	ND	15.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	0.30	ND	ND	0.10	0.40	ND	ND	0.30	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	10.0	ND	3.9	4.2	5.9	7.2	ND	7.5	17.0	7.7	4.1	7.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	1.7	ND	ND	1.9	1.9	ND	ND	1.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	0.03	ND	ND	0.01	0.03	ND	ND	0.04	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	INSUFFICIENT DATA
SS	40.0 MG/L	INSUFFICIENT DATA
TP	NA	INSUFFICIENT DATA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HEARST
 PLANT : HEARST LAGOON
 WORKS NUMBER : 110000338
 TREATMENT : AERATED CELL PLUS LAGOON
 : CONTINUOUS DISCHARGE
 : REGULATED DISCHARGE VOLUME
 DESIGN CAPACITY : 6.81 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MATTAWISHKWIA RIVER
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 5,270

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.80	2.13	2.50	4.39	3.48	2.81	2.38	2.70	2.43	2.55	3.10	2.01	2.69	
LAGOON DISCHARGE	ND	ND	ND	ND	873.66	ND	ND	ND	ND	110.76	105.39	ND	363.27	
BOD5														
INFLUENT (MG/L)	122.0	78.0	72.0	95.0	48.0	94.0	68.0	43.0	101.0	55.0	101.0	145.0	85.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	17.3	ND	ND	ND	ND	1.4	ND	ND	9.4	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	60.20	ND	ND	ND	ND	3.57	ND	ND	25.29	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	98.0	68.0	65.0	293.0	47.0	108.0	40.0	210.0	95.0	120.0	235.0	670.0	170.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	42.5	ND	ND	ND	ND	3.2	ND	ND	22.9	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	147.90	ND	ND	ND	ND	8.16	ND	ND	61.60	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.4	4.6	4.6	4.8	2.8	4.4	5.1	3.0	4.3	3.1	2.6	5.0	4.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	2.4	ND	ND	ND	ND	1.1	1.6	ND	1.7	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	8.35	ND	ND	ND	ND	2.80	4.96	ND	4.57	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HORNEPAYNE
 PLANT : HORNEPAYNE WPCP
 WORKS NUMBER : 110001952
 TREATMENT : EXTENDED AERATION
 :
 :
 DESIGN CAPACITY : 1.36 (1000 M3)

REGION : NORTHEAST
 DISTRICT : ALGOMA
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : JACKFISH RIVER
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 1,675

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.77	0.68	0.98	1.45	1.28	0.90	0.80	1.23	0.78	0.90	1.17	0.77	0.98	
BOD5														
INFLUENT (MG/L)	77.0	113.0	80.0	52.0	59.0	54.0	62.0	50.0	63.0	71.0	32.0	121.0	69.5	
EFFLUENT (MG/L)	8.7	3.5	5.4	8.5	2.0	23.4	0.9	1.7	4.6	3.0	3.1	5.0	5.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.69	2.38	5.29	12.32	2.56	21.06	0.72	2.09	3.58	2.70	3.62	3.85	5.68	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	95.0	130.0	83.0	48.0	48.0	48.0	35.0	35.0	47.5	73.0	55.0	73.0	64.2	
EFFLUENT (MG/L)	8.5	8.5	15.0	15.0	4.0	18.0	4.5	4.0	7.0	5.4	10.0	17.5	9.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.54	5.78	14.70	21.75	5.12	16.20	3.60	4.92	5.46	4.86	11.70	13.47	9.60	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.2	5.0	4.9	2.6	2.8	3.7	2.4	3.0	3.9	5.2	2.3	4.1	3.7	
EFFLUENT (MG/L)	2.8	2.8	1.7	1.5	1.4	3.4	1.4	2.2	0.7	1.1	1.3	2.5	1.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.15	1.90	1.66	2.17	1.79	3.06	1.12	2.70	0.54	0.99	1.52	1.92	1.86	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : IROQUOIS FALLS
 PLANT : IROQUOIS FALLS WPCP
 WORKS NUMBER : 110002121
 TREATMENT : CONTACT STABILIZATION
 :
 :
 DESIGN CAPACITY : 4.09 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : ABITIBI RIVER
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 5,575

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.64	2.54	2.94	5.29	4.13	3.74	3.04	3.25	2.92	3.02	3.70	2.88	3.34	
BOD5														
INFLUENT (MG/L)	130.0	101.0	97.0	50.0	40.0	49.0	25.0	41.0	77.0	104.0	45.0	69.0	69.0	
EFFLUENT (MG/L)	14.0	18.0	18.5	12.1	30.5	27.5	19.0	30.5	22.0	32.5	16.5	19.0	21.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	36.96	45.72	54.39	64.00	125.96	102.85	57.76	99.12	64.24	98.15	61.05	54.72	72.48	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	135.0	83.0	78.0	44.0	62.0	63.0	39.0	70.7	104.3	88.0	63.0	56.0	73.8	
EFFLUENT (MG/L)	6.5	7.7	6.6	5.0	7.3	7.3	6.3	8.7	5.0	5.8	8.4	13.4	7.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	17.16	19.55	19.40	26.45	30.14	27.30	19.15	28.27	14.60	17.51	31.08	38.59	24.38	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.8	5.5	8.2	2.8	3.4	3.9	3.2	5.0	4.3	3.1	3.0	3.8	4.3	
EFFLUENT (MG/L)	ND	2.7	3.1	1.6	1.6	1.2	ND	7.3	2.8	2.5	ND	2.2	2.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	6.85	9.11	8.46	6.60	4.48	ND	23.72	8.17	7.55	ND	6.33	9.35	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : IROQUOIS FALLS
 PLANT : PORQUIS JUNCTION LAGOON
 WORKS NUMBER : 120003290
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : SINGE CELL
 :
 DESIGN CAPACITY : 0.04 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : STATION CR.TO MEADOW CR.
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 176

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.05	0.05	0.07	0.14	0.13	0.11	0.08	0.09	0.07	0.08	0.10	0.06	0.09	
LAGOON DISCHARGE		ND		ND	20.00	ND	ND	ND	ND	ND	ND	ND	6.67	
BOD5														
INFLUENT (MG/L)	142.0	160.0	69.0	16.0	31.0	47.0	78.0	108.0	77.0	88.0	118.0	159.0	91.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	11.7	ND	ND	ND	ND	ND	ND	ND	11.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	1.52	ND	ND	ND	ND	ND	ND	ND	1.05	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	225.0	85.0	77.0	100.0	45.0	38.0	20.0	120.0	95.0	88.0	110.0	120.0	93.6	
EFFLUENT (MG/L)	ND	ND	4.5	4.5	10.0	3.0	ND	ND	ND	ND	ND	ND	5.5	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	0.31	0.63	1.30	0.33	ND	ND	ND	ND	ND	ND	0.50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.0	5.0	5.0	1.2	2.6	3.1	3.4	5.9	5.8	5.2	3.9	6.5	4.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	1.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.19	ND	ND	ND	ND	ND	ND	ND	0.14	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : JOGUES
 PLANT : JOGUES LAGOON
 WORKS NUMBER : 120002022
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 27.00 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : PRUNE CREEK
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 215

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	225.0	180.0	220.0	138.0	185.0	88.0	165.0	226.0	ND	175.0	302.0	185.0	189.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	85.0	60.0	140.0	210.0	160.0	75.0	150.0	110.0	ND	95.0	190.0	170.0	131.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	11.0	13.0	13.0	7.2	6.5	5.2	6.7	8.7	ND	8.5	8.5	8.8	8.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO DISCHARGE
SS	25.0 MG/L	NO DISCHARGE
TP	1.0 MG/L	NO DISCHARGE

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KAPUSKASING
 PLANT : KAPUSKASING WEST END WPCP
 WORKS NUMBER : 120002059
 TREATMENT : EXTENDED AERATION

DESIGN CAPACITY : 0.68 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : KAPUSKASING RIVER
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED :

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DISCHARGE
SS	25.0 MG/L	NO DISCHARGE
TP	NA	NO DISCHARGE

NOTE:

BOD - HAS NO CRITERIA
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KAPUSKASING
 PLANT : KAPUSKASING WPCP
 WORKS NUMBER : 110003004
 TREATMENT : EXTENDED AERATION
 :
 :
 DESIGN CAPACITY : 9.09 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : KAPUSKASING RIVER
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 12,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.28	5.24	6.24	10.57	10.55	7.47	6.11	6.29	5.55	6.12	7.27	5.08	6.81	
BOD5														
INFLUENT (MG/L)	150.0	133.0	170.0	50.0	51.0	54.0	104.5	117.8	113.6	84.0	87.0	66.0	98.4	
EFFLUENT (MG/L)	15.5	9.3	6.1	8.3	3.5	6.3	4.1	6.3	7.9	29.0	4.9	3.0	8.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	81.84	48.73	38.06	87.73	36.92	47.06	25.05	39.62	43.84	177.48	35.62	15.24	59.25	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	111.0	121.0	258.0	220.0	79.0	83.0	73.0	110.7	99.5	190.0	96.0	83.0	127.0	
EFFLUENT (MG/L)	10.8	15.2	9.3	5.3	4.5	4.0	4.3	4.6	6.3	5.6	7.9	13.3	7.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	57.02	79.64	58.03	56.02	47.47	29.88	26.27	28.93	34.96	34.27	57.43	67.56	51.76	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	4.8	ND	2.6	3.6	3.0	3.1	7.2	3.5	4.8	4.5	3.8	4.1	
EFFLUENT (MG/L)	ND	2.2	0.7	0.4	1.0	1.7	2.0	1.6	1.5	2.4	2.0	6.6	2.0	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	11.52	4.36	4.22	10.55	12.69	12.22	10.06	8.32	14.68	14.54	33.52	13.62	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KIRKLAND LAKE
 PLANT : KIRKLAND LAKE WPCP
 WORKS NUMBER : 120000015
 TREATMENT : CONTACT STABILIZATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 13.63 (1000 M3)

REGION : NORTHEAST
 DISTRICT : TIMISKAMING
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MURDOCK CREEK
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 12,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	11.39	10.98	12.88	19.57	15.36	11.12	9.32	9.34	7.26	8.84	10.96	11.77	11.57	
BOD5														
INFLUENT (MG/L)	41.0	50.0	49.0	26.0	33.0	38.0	14.0	60.3	50.0	50.0	38.0	31.0	40.0	
EFFLUENT (MG/L)	5.4	12.0	7.0	4.5	6.7	8.8	5.5	2.3	5.0	6.9	14.6	4.0	6.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	61.50	131.76	90.16	88.06	102.91	97.85	51.26	21.48	36.30	60.99	160.01	47.08	79.83	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	66.0	65.0	56.0	37.0	39.0	61.0	43.6	77.0	67.0	91.0	63.0	46.0	59.3	
EFFLUENT (MG/L)	25.2	20.4	22.0	18.6	14.6	9.8	7.6	9.6	12.5	13.0	12.1	17.0	15.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	287.02	223.99	283.36	364.00	224.25	108.97	70.83	89.66	90.75	114.92	132.61	200.09	175.86	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.0	3.2	2.8	2.2	2.4	3.2	3.0	3.5	4.7	3.8	3.1	2.6	3.1	
EFFLUENT (MG/L)	0.9	1.3*	1.1*	0.5	0.5	0.4	0.6	0.9	1.2*	0.8	0.5	0.6	0.8	3
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	10.25	14.27	14.16	9.78	7.68	4.44	5.59	8.40	8.71	7.07	5.48	7.06	9.26	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

NO ACTION - MARGINAL FAILURE-MONITORING LEVEL OF FAILED PARAMETER CLOSELY

START DATE END DATE ANTICIPATED
 COMPLIANCE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KIRKLAND LAKE
 PLANT : SWASTIKA WPCP
 WORKS NUMBER : 120001942
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE

DESIGN CAPACITY : 0.39 (1000 M3)

REGION : NORTHEAST
 DISTRICT : TIMISKAMING
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : OTTO LAKE
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 700

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	82.0	ND	40.0	26.0	38.0	56.0	74.0	92.0	108.0	100.0	70.0	70.0	68.7	
EFFLUENT (MG/L)	7.8	ND	3.5	3.6	2.1	2.4	2.8	2.3	3.4	2.8	3.6	15.0	4.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	95.0	ND	85.0	40.0	60.0	40.0	45.0	60.0	110.0	100.0	90.0	55.0	70.9	
EFFLUENT (MG/L)	35.0	ND	15.0	15.0	15.0	20.0	15.5	10.0	10.0	10.0	15.0	20.0	16.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.3	ND	3.1	1.3	2.7	4.7	4.6	3.8	5.6	3.5	3.6	2.6	3.6	
EFFLUENT (MG/L)	1.1	ND	0.7	0.5	ND	1.0	0.6	0.6	1.0	ND	0.7	0.8	0.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LARDER LAKE
 PLANT : LARDER LAKE TOWNSITE WPCP
 WORKS NUMBER : 120000033
 TREATMENT : EXFILTRATION LAGOON
 :
 :
 DESIGN CAPACITY : 0.59 (1000 M3)

REGION : NORTHEAST
 DISTRICT : TIMISKAMING
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : LARDER LAKE
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,100

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
<u>BOD5</u>														
INFLUENT (MG/L)	88.0	100.0	65.0	ND	20.0	54.0	ND	36.0	275.0	74.0	72.0	ND	87.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	100.0	60.0	75.0	ND	50.0	55.0	ND	90.0	140.0	95.0	100.0	ND	85.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	4.3	5.3	5.3	ND	1.3	2.9	ND	1.8	5.5	3.8	3.3	ND	3.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:

BOD - HAS NO CRITERIA
 SS - HAS NO CRITERIA
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LATCHFORD
 PLANT : LATCHFORD WPCP
 WORKS NUMBER : 110001774
 TREATMENT : EXTENDED AERATION
 :
 :
 DESIGN CAPACITY : 0.34 (1000 M3)

REGION : NORTHEAST
 DISTRICT : TIMISKAMING
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MONTREAL RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 427

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.41	0.32	0.51	0.61	0.48	0.39	0.31	0.26	0.25	0.27	0.25	0.27	0.36	
BOD5														
INFLUENT (MG/L)	77.0	40.0	29.0	27.0	18.0	45.0	37.0	145.0	69.0	65.0	94.0	62.0	59.0	
EFFLUENT (MG/L)	6.0	11.2	4.8	5.0	7.9	3.8	1.7	2.9	1.5	7.2	22.0	2.0	6.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.46	3.58	2.44	3.05	3.79	1.48	0.52	0.75	0.37	1.94	5.50	0.54	2.27	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	140.0	45.0	45.0	37.0	30.0	82.0	87.5	495.0	47.5	265.0	75.0	30.0	114.9	
EFFLUENT (MG/L)	18.7	12.4	10.8	11.5	14.1	12.3	10.2	9.6	10.6	9.0	12.5	19.5	12.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.66	3.96	5.50	7.01	6.76	4.79	3.16	2.49	2.65	2.43	3.12	5.26	4.54	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.7	2.1	1.6	1.7	1.0	2.5	3.9	5.6	3.2	4.8	2.5	1.7	2.9	
EFFLUENT (MG/L)	0.9	3.0	0.4	0.4	0.5	0.5	0.4	0.3	0.6	1.1	1.1	1.2	0.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.36	0.96	0.20	0.24	0.24	0.19	0.12	0.07	0.15	0.29	0.27	0.32	0.32	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LITTLE CURRENT
 PLANT : LITTLE CURRENT LAGOON
 WORKS NUMBER : 110000392
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 DESIGN CAPACITY : 0.92 (1000 M3)

REGION : NORTHEAST
 DISTRICT : MANITOULIN
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : DITCH TO GEORGIAN BAY
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.82	0.88	1.48	1.72	0.86	0.72	0.66	0.66	0.58	0.64	0.80	ND	0.89	
LAGOON DISCHARGE	ND	ND	ND	ND	141.20	ND	ND	ND	ND	ND	154.00	ND	147.60	
BOD5														
INFLUENT (MG/L)	80.0	52.0	ND	ND	122.0	ND	ND	ND	116.0	95.0	ND	ND	93.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	21.9	ND	ND	ND	ND	ND	5.9	ND	13.9	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	18.83	ND	ND	ND	ND	ND	4.72	ND	12.37	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	95.0	100.0	ND	ND	70.0	ND	ND	ND	80.0	100.0	ND	ND	89.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	38.3	ND	ND	ND	ND	ND	5.8	ND	22.1	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	32.93	ND	ND	ND	ND	ND	4.64	ND	19.67	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.0	3.5	ND	ND	5.0	ND	ND	ND	6.8	5.8	ND	ND	5.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	3.5	ND	3.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	3.09	ND	ND	ND	ND	ND	2.80	ND	3.20	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MATTAWA
PLANT : MATTAWA LAGOON
WORKS NUMBER : 110000436
TREATMENT : EXFILTRATION LAGOON

DESIGN CAPACITY : 1.09 (1000 M3)

REGION : NORTHEAST
DISTRICT : NIPPISSING
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MATTAWA RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,686

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.73	1.54	1.45	1.54	1.59	1.57	1.20	ND	1.27	1.18	1.46	1.35	1.44	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	85.0	ND	ND	ND	ND	ND	ND	ND	85.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	45.0	ND	ND	ND	ND	ND	ND	ND	45.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	3.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:

BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MATTICE-VAL COTE
 PLANT : MATTICE LAGOON
 WORKS NUMBER : 120001791
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 :
 DESIGN CAPACITY : 0.58 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MISSINABI RIVER
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 400

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.28	0.24	0.29	0.46	0.42	0.34	0.64	0.39	0.32	0.36	0.47	0.21	0.37	
LAGOON DISCHARGE	ND	ND	ND	ND	60.40	ND	ND	ND	ND	60.60	ND	ND	60.50	
BOD5														
INFLUENT (MG/L)	68.0	ND	ND	ND	172.0	ND	ND	34.0	34.0	66.0	ND	88.0	77.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	14.0	ND	ND	ND	ND	5.1	ND	ND	9.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	5.88	ND	ND	ND	ND	1.83	ND	ND	3.55	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	120.0	ND	ND	ND	90.0	ND	ND	40.0	40.0	110.0	ND	75.0	79.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	22.5	ND	ND	ND	ND	13.3	ND	ND	17.9	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	9.45	ND	ND	ND	ND	4.78	ND	ND	6.62	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.4	ND	ND	ND	3.9	ND	ND	4.2	4.2	4.6	ND	4.2	4.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	2.0	ND	ND	ND	ND	1.6	ND	ND	1.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.84	ND	ND	ND	ND	0.57	ND	ND	0.67	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MCGARRY
 PLANT : VIRGINIATOWN AND KEARNS WPCP
 WORKS NUMBER : 120000024
 TREATMENT : COMMUNAL SEPTIC TANK
 :
 :
 DESIGN CAPACITY : 0.72 (1000 M3)

REGION : NORTHEAST
 DISTRICT : TIMISKAMING
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : TAILING PD TO LARDER L.
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	37.0	31.0	27.0	17.0	18.0	7.0	17.0	18.0	8.0	10.0	20.0	28.0	19.8	
EFFLUENT (MG/L)	19.0	17.0	21.0	8.0	14.0	6.5	14.0	18.0	21.0	8.5	15.0	25.0	15.6	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
PERCENT REMOVAL	49	45	22	53	22	07	18		ND	15	25	11	21*	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	50.0	40.0	55.0	35.0	15.0	25.0	9.0	25.0	7.0	15.0	20.0	35.0	27.6	
EFFLUENT (MG/L)	25.0	15.0	25.0	20.0	24.0	65.0	10.0	25.0	20.0	9.0	20.0	40.0	24.8	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
PERCENT REMOVAL	50	63	55	43	ND	ND	ND		ND	40		ND	10*	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	1.6	1.6	1.8	1.4	0.9	1.0	0.5	2.0	0.8	0.8	1.2	1.8	1.3	
EFFLUENT (MG/L)	1.4	1.4	1.7	0.9	0.9	0.9	0.5	2.2	1.5	1.0	1.0	1.7	1.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30%	NO
SS	50%	NO
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : MICHIPICOTEN
 PLANT : WAWA LAGOON
 WORKS NUMBER : 110000454
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 4.54 (1000 M3)

REGION : NORTHEAST
 DISTRICT : ALGOMA
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MAGPIE RIVER
 MINOR BASIN : SUPERIOR
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.70	2.56	2.51	3.74	3.74	2.50	1.97	2.12	2.11	1.97	2.17	2.35	2.54	
LAGOON DISCHARGE	83.60	71.75	77.49	117.32	116.06	74.86	61.07	65.73	63.21	61.21	65.15	72.78	77.52	
BOD5														
INFLUENT (MG/L)	ND	60.0	ND	59.0	103.0	780.0	130.0	69.0	65.0	80.0	140.0	150.0	163.6	
EFFLUENT (MG/L)	ND	5.3	ND	8.4	12.0	2.2	2.6	2.8	3.8	12.0	14.0	3.9	6.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	13.56	ND	31.41	44.88	5.50	5.12	5.93	8.01	23.64	30.38	9.16	17.02	
LOADING LIMIT (KG/D)													107.5	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	45.0	ND	85.0	180.0	65.0	40.0	40.0	290.0	55.0	175.0	260.0	123.5	
EFFLUENT (MG/L)	ND	8.0	ND	6.1	22.5	3.0	10.0	3.0	3.0	5.0	11.0	4.0	7.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	20.48	ND	22.81	84.15	7.50	19.70	6.36	6.33	9.85	23.87	9.40	19.30	
LOADING LIMIT (KG/D)													129.0	
TOTAL PHOSPHORUS														
INFLUENT (MG/L)	ND	2.9	ND	3.2	4.6	3.1	4.2	4.4	3.5	4.2	4.9	5.5	4.1	
EFFLUENT (MG/L)	ND	1.3	ND	0.9	0.9	0.2	0.5	0.6	0.7	0.3	0.7	0.9	0.7	
CONCENTRATION LIMIT (MG/L)													1.0	
LOADING (KG/D)	ND	3.32	ND	3.36	3.36	0.50	0.98	1.27	1.47	0.59	1.51	2.11	1.78	
LOADING LIMIT (KG/D)													4.35	

SUMMARY

PARAM	CRITERIA	LOADING	COMPLIES WITH CONC	LOADING
BOD	25.0 MG/L	107.5 KG/D	YES	YES
SS	30.0 MG/L	129.0 KG/D	YES	YES
TP	1.0 MG/L	4.3 KG/D	YES	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED

ANTICIPATED
START DATE END DATE COMPLIANCE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MICHIPICOTEN
 PLANT : WAWA LAGOON
 WORKS NUMBER : 110000454
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 4.54 (1000 M3)

REGION : NORTHEAST
 DISTRICT : ALGOMA
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MAGPIE RIVER
 MINOR BASIN : SUPERIOR
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.70	2.56	2.51	3.74	3.74	2.50	1.97	2.12	2.11	1.97	2.17	2.35	2.54	
LAGOON DISCHARGE	83.60	71.75	77.49	117.32	116.06	74.86	61.07	65.73	63.21	61.21	65.15	72.78	77.52	
BOD5														
INFLUENT (MG/L)	ND	60.0	ND	59.0	103.0	780.0	130.0	69.0	65.0	80.0	140.0	150.0	163.6	
EFFLUENT (MG/L)	ND	5.3	ND	8.4	12.0	2.2	2.6	2.8	3.8	12.0	14.0	3.9	6.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	13.56	ND	31.41	44.88	5.50	5.12	5.93	8.01	23.64	30.38	9.16	17.02*	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	45.0	ND	85.0	180.0	65.0	40.0	40.0	290.0	55.0	175.0	260.0	123.5	
EFFLUENT (MG/L)	ND	8.0	ND	6.1	22.5	3.0	10.0	3.0	3.0	5.0	11.0	4.0	7.6	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	20.48	ND	22.81	84.15	7.50	19.70	6.36	6.33	9.85	23.87	9.40	19.30*	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	2.9	ND	3.2	4.6	3.1	4.2	4.4	3.5	4.2	4.9	5.5	4.1	
EFFLUENT (MG/L)	ND	1.3*	ND	0.9	0.9	0.2	0.5	0.6	0.7	0.3	0.7	0.9	0.7	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	3.32	ND	3.36	3.36	0.50	0.98	1.27	1.47	0.59	1.51	2.11	1.78*	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MOONBEAM
 PLANT : MOONBEAM LAGOON
 WORKS NUMBER : 110000230
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 DESIGN CAPACITY : 0.65 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : CREEK SYS TO GROUNDHOG R
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 1,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	0.21	0.22	ND	ND	1.12	1.00	ND	2.14	ND	0.94	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	413.0	185.0	235.0	140.0	64.0	235.0	191.3	125.0	80.0	ND	ND	ND	185.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	ND	4.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.63	ND	4.23	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	940.0	130.0	550.0	220.0	85.0	140.0	175.0	145.0	120.0	ND	ND	ND	278.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	38.3	ND	38.3	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	81.96	ND	36.00	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	11.5	6.8	7.8	3.1	2.5	4.8	6.0	6.1	3.2	ND	ND	ND	5.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	1.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.21	ND	1.41	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MOOSONEE D.A.B.
 PLANT : MOOSONEE WPCP (NORTH)
 WORKS NUMBER : 120000319
 TREATMENT : EXTENDED AERATION
 :
 :
 DESIGN CAPACITY : 0.25 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MOOSE RIVER
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 300

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.26	0.23	0.24	0.20	0.21	0.20	0.20	0.20	0.19	0.18	0.18	0.19	0.21	
<u>BOD5</u>														
INFLUENT (MG/L)	ND	22.0	29.0	24.0	67.0	48.0	39.0	25.0	82.5	ND	91.0	137.0	56.5	
EFFLUENT (MG/L)	3.7	11.1	3.6	2.4	11.2	4.5	6.5	7.6	7.0	ND	4.7	8.5	6.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.96	2.55	0.86	0.48	2.35	0.90	1.30	1.52	1.33	ND	0.84	1.61	1.34	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	121.0	62.0	71.0	49.0	123.0	115.0	59.0	75.0	209.5	ND	73.0	273.0	111.9	
EFFLUENT (MG/L)	ND	20.3	17.3	11.0	75.5	7.2	9.0	11.0	17.5	ND	8.0	13.4	19.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	4.66	4.15	2.20	15.85	1.44	1.80	2.20	3.32	ND	1.44	2.54	3.99	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	ND	2.3	2.2	1.9	3.5	4.1	2.4	2.3	ND	ND	3.8	5.6	3.1	
EFFLUENT (MG/L)	0.4	0.5	0.4	0.3	0.5	0.3	0.6	1.0	ND	ND	0.6	0.9	0.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.10	0.11	0.09	0.06	0.10	0.06	0.12	0.20	ND	ND	0.10	0.17	0.13	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MOOSONEE D.A.B.
 PLANT : MOOSONEE WPCP (OLD TOWNSITE)
 WORKS NUMBER : 110001060
 TREATMENT : CONTACT STABILIZATION
 :
 :
 DESIGN CAPACITY : 0.50 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : STORE CK TO MOOSE RIVER
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 1,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.55	0.61	0.70	0.78	0.74	0.70	0.74	0.71	0.81	0.88	0.65	0.55	0.70	
<u>BOD5</u>														
INFLUENT (MG/L)	ND	88.0	79.0	117.0	122.0	217.0	118.0	125.0	110.0	ND	91.0	154.0	122.1	
EFFLUENT (MG/L)	12.0	53.2	66.0	21.6	30.0	74.4	27.2	57.3	42.7	ND	6.8	74.0	42.3*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.60	32.45	46.20	16.84	22.20	52.08	20.12	40.68	34.58	ND	4.42	40.70	29.61	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	153.0	205.0	133.0	454.0	100.0	149.0	205.0	217.0	173.0	ND	80.0	130.0	181.7	
EFFLUENT (MG/L)	ND	70.5	89.5	22.0	27.0	150.0	42.5	14.5	13.0	ND	8.0	20.2	45.7*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	43.00	62.65	17.16	19.98	105.00	31.45	10.29	10.53	ND	5.20	11.11	31.99	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	ND	5.0	5.6	4.9	4.9	8.6	5.6	5.7	ND	ND	3.4	5.2	5.4	
EFFLUENT (MG/L)	2.4	3.2	4.0	1.3	2.2	6.2	1.8	0.6	ND	ND	0.5	2.1	2.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	1.32	1.95	2.80	1.01	1.62	4.34	1.33	0.42	ND	ND	0.32	1.15	1.68	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO
SS	25.0 MG/L	NO
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE

START DATE END DATE ANTICIPATED
 COMPLIANCE

1989/09

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NEW LISKEARD
 PLANT : NEW LISKEARD LAGOON
 WORKS NUMBER : 110000515
 TREATMENT : AERATED CELL PLUS LAGOON
 : CONTINUOUS DISCHARGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 DESIGN CAPACITY : 5.50 (1000 M3)

REGION : NORTHEAST
 DISTRICT : TIMISKAMING
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : WABI RIVER
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 5,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.22	3.15	3.92	6.54	5.58	5.29	4.26	4.07	3.41	3.35	4.05	3.32	4.18	
LAGOON DISCHARGE	99.96	88.05	121.54	199.24	172.89	117.98	131.95	126.01	102.43	103.81	122.22	103.02	124.09	
BOD5														
INFLUENT (MG/L)	127.0	132.0	114.0	50.0	55.0	ND	60.0	80.0	105.0	151.0	71.0	140.0	98.6	
EFFLUENT (MG/L)	14.5	23.0	20.5	12.0	9.4	ND	14.0	4.2	3.7	2.3	5.7	3.0	10.2	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	46.69	72.45	80.36	78.48	52.45	ND	59.64	17.09	12.61	7.70	23.08	9.96	42.64	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	144.0	142.0	183.0	75.0	46.0	ND	74.0	140.0	85.0	191.0	90.0	242.0	128.4	
EFFLUENT (MG/L)	10.0	10.0	12.5	10.0	16.3	ND	20.0	2.0	8.0	5.0	6.0	7.0	9.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	32.20	31.50	49.00	65.40	90.95	ND	85.20	8.14	27.28	16.75	24.30	23.24	40.55	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	6.3	6.6	2.1	3.5	ND	4.7	3.9	5.2	5.9	3.4	6.0	4.9	
EFFLUENT (MG/L)	0.7	1.2*	1.5*	1.5*	0.6	ND	1.7*	2.2*	0.7	0.4	0.4	0.5	1.0	5
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.25	3.78	5.88	9.81	3.34	ND	7.24	8.95	2.38	1.34	1.62	1.66	4.18	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - OPERATIONAL PROCEDURES BEING UPGRADED

START DATE END DATE ANTICIPATED
 COMPLIANCE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NICKEL CENTRE
 PLANT : CONISTON WPCP
 WORKS NUMBER : 110000123
 TREATMENT : OXIDATION DITCH
 : CONVENTIONAL ACTIVATED SLUDGE
 :
 DESIGN CAPACITY : 3.00 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : CONISTON CREEK
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,790

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.34	1.31	1.63	3.24	2.13	2.17	0.82	1.45	1.07	1.17	1.51	1.27	1.59	
BOD5														
INFLUENT (MG/L)	105.0	106.0	114.0	39.0	59.0	72.0	ND	109.0	147.0	127.0	113.0	183.0	106.7	
EFFLUENT (MG/L)	11.5	14.0	10.0	20.2	6.4	8.3	ND	10.1	3.8	13.0	10.6	21.0	11.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	15.41	18.34	16.30	65.44	13.63	18.01	ND	14.64	4.06	15.21	16.00	26.67	18.60	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	88.0	88.0	87.0	60.0	73.0	72.0	75.0	73.0	117.0	117.0	113.0	125.0	90.7	
EFFLUENT (MG/L)	8.5	8.0	19.0	19.8	5.0	6.1	3.8	10.6	5.5	15.8	5.4	4.0	9.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	11.39	10.48	30.97	64.15	10.65	13.23	3.11	15.37	5.88	18.48	8.15	5.08	14.79	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.5	4.9	5.3	2.2	3.6	4.3	ND	6.1	6.2	5.3	4.9	5.8	4.9	
EFFLUENT (MG/L)	2.9	3.0	2.6	1.5	1.6	2.3	ND	4.1	4.2	3.2	2.5	3.0	2.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	3.88	3.93	4.23	4.86	3.40	4.99	ND	5.94	4.49	3.74	3.77	3.81	4.45	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

EQUIPMENT/MAINTENANCE - NEW EQUIPMENT BEING INSTALLED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1990/08	1991/01	1991/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NICKEL CENTRE
 PLANT : FALCONBRIDGE TOWNSITE WPCP
 WORKS NUMBER : 120001158
 TREATMENT : TRICKLING FILTER
 :
 :
 DESIGN CAPACITY : 0.91 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : FALCON CR. TO CONISTON
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 836

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.59	0.70	0.94	0.65	0.75	0.66	0.63	0.86	0.92	0.92	ND	0.83	0.77	
BOD5														
INFLUENT (MG/L)	87.0	129.0	105.0	86.0	ND	59.0	ND	66.0	230.0	64.0	ND	66.0	99.1	
EFFLUENT (MG/L)	34.5	32.5	37.0	42.0	ND	43.5	ND	36.5	42.0	45.0	ND	34.0	38.6*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	20.35	22.75	34.78	27.30	ND	28.71	ND	31.39	38.64	41.40	ND	28.22	29.72	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	207.0	117.0	138.0	89.0	78.0	56.0	58.0	69.0	240.0	106.0	ND	42.0	109.1	
EFFLUENT (MG/L)	30.0	37.0	41.0	63.3	51.6	42.5	49.0	33.8	35.0	73.7	ND	30.1	44.3*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	17.70	25.90	38.54	41.14	38.70	28.05	30.87	29.06	32.20	67.80	ND	24.98	34.11	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.9	4.9	6.3	7.6	ND	4.0	ND	11.5	5.7	7.2	ND	4.5	6.3	
EFFLUENT (MG/L)	3.3	3.2	3.4	6.0	ND	3.8	ND	5.1	3.0	3.3	ND	3.2	3.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	1.94	2.24	3.19	3.90	ND	2.50	ND	4.38	2.76	3.03	ND	2.65	2.93	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO
SS	25.0 MG/L	NO
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - SAMPLING PROGRAM BEING MODIFIED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989/04	1990/12	1990/12

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NICKEL CENTRE
 PLANT : GARSON LAGOON (STANDBY)
 WORKS NUMBER : 120004887
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 DESIGN CAPACITY : 3.45 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : FLOW TO SUDBURY WPCP
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,107

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)						0.59		0.77	0.87		1.13		0.56	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	163.0	100.0	128.0	ND	48.0	280.0	ND	ND	ND	143.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.0	5.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.80	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	180.0	120.0	60.0	ND	40.0	100.0	ND	ND	ND	100.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	24.0	24.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.44	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	6.2	7.8	6.5	ND	4.7	9.2	ND	ND	ND	6.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	2.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.29	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NICKEL CENTRE
 PLANT : WAHNAPIITAE LAGOON
 WORKS NUMBER : 120003156
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 DESIGN CAPACITY : 1.33 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : WANAPITEI RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 958

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.60	0.51	1.55	1.08	0.88	0.72	ND	0.73	ND	0.65	ND	0.83	0.84	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	16.0	24.0	ND	30.0	80.0	ND	ND	ND	37.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	35.0	36.0	ND	83.0	170.0	ND	ND	ND	81.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	1.7	1.7	ND	1.7	2.3	ND	ND	ND	1.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	NO DIRECT DISCHARGE
SS	40.0 MG/L	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NORTH BAY
 PLANT : NORTH BAY WPCP
 WORKS NUMBER : 110000533
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 36.36 (1000 M3)

REGION : NORTHEAST
 DISTRICT : NIPPISSING
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE NIPISSING
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 48,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	17.71	20.69	27.66	35.66	32.92	35.31	29.28	31.29	25.40	26.43	33.69	24.58	28.39	
BOD5														
INFLUENT (MG/L)	154.0	130.0	111.0	93.0	113.0	124.0	130.0	172.4	91.0	134.0	237.0	228.0	143.1	
EFFLUENT (MG/L)	7.3	13.6	10.9	3.8	4.0	4.5	5.8	10.3	7.0	8.0	20.5	16.7	9.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	129.28	281.38	301.49	135.50	131.68	158.89	169.82	322.28	177.80	211.44	690.64	410.48	266.87	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	248.0	240.0	349.0	252.0	287.0	284.0	547.5	572.3	315.0	312.0	344.0	632.0	365.2	
EFFLUENT (MG/L)	6.9	6.2	13.4	7.7	5.8	5.3	8.3	6.5	6.7	6.6	5.8	5.2	7.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	122.19	128.27	370.64	274.58	190.93	187.14	243.02	203.38	170.18	174.43	195.40	127.81	198.73	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	10.7	3.8	8.4	6.5	6.1	5.8	12.6	11.5	4.8	7.7	7.8	9.4	7.9	
EFFLUENT (MG/L)	0.8	1.0	1.0	0.6	0.7	0.7	0.6	0.8	0.9	0.9	0.7	0.6	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	14.16	20.69	27.66	21.39	23.04	24.71	17.56	25.03	22.86	23.78	23.58	14.74	22.71	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NORTH HIMSWORTH
 PLANT : CALLANDER LAGOON
 WORKS NUMBER : 110001747
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.47 (1000 M3)

REGION : NORTHEAST
 DISTRICT : PARRY SOUND
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : DITCH TO CALLANDER BAY
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,220

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.59	0.49	1.13	0.89	0.92	0.83	0.65	0.62	0.53	0.59	0.79	0.63	0.72	
LAGOON DISCHARGE	ND	13.77	ND	26.16	28.36	ND	ND	ND	ND	ND	ND	ND	22.76	
BOD5														
INFLUENT (MG/L)	100.0	119.0	105.0	60.0	106.0	82.0	70.0	65.0	92.0	110.0	108.0	125.0	95.2	
EFFLUENT (MG/L)	ND	15.5	ND	7.0	7.3	ND	ND	ND	ND	ND	ND	ND	9.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	7.59	ND	6.23	6.71	ND	ND	ND	ND	ND	ND	ND	7.13	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	125.0	135.0	150.0	93.0	190.0	95.0	60.0	80.0	78.0	150.0	138.0	110.0	117.0	
EFFLUENT (MG/L)	ND	15.0	ND	72.5	11.0	ND	ND	ND	ND	ND	ND	ND	32.8*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	7.35	ND	64.52	10.12	ND	ND	ND	ND	ND	ND	ND	23.62	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.5	6.5	7.0	3.3	4.9	5.9	4.9	5.0	5.4	6.1	4.1	4.9	5.3	
EFFLUENT (MG/L)	ND	2.4*	ND	0.8	1.0	ND	ND	ND	ND	ND	ND	ND	1.4	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	1.17	ND	0.71	0.92	ND	ND	ND	ND	ND	ND	ND	1.01	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - CONSTRUCTION COMPLETE

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989/08	1989/09
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ONAPING FALLS
 PLANT : DOWLING WPCP
 WORKS NUMBER : 110003077
 TREATMENT : EXTENDED AERATION
 :
 :
 DESIGN CAPACITY : 2.08 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : ONAPING RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,090

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.19	2.01	2.12	2.37	2.43	2.32	2.37	2.07	2.12	2.06	1.94	2.00	2.17	
BOD5														
INFLUENT (MG/L)	37.0	41.0	69.0	41.0	28.0	29.0	25.0	32.0	32.0	61.0	48.0	53.0	41.3	
EFFLUENT (MG/L)	6.7	7.7	7.9	8.6	9.4	3.7	4.4	2.5	3.5	4.4	4.5	2.9	5.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	14.67	15.47	16.74	20.38	22.84	8.58	10.42	5.17	7.42	9.06	8.73	5.80	11.94	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	31.0	30.0	51.0	37.0	74.0	46.0	35.0	32.0	40.0	53.0	35.0	33.0	41.4	
EFFLUENT (MG/L)	6.0	4.9	6.2	4.8	6.5	5.9	7.0	5.4	5.0	6.0	3.5	2.9	5.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	13.14	9.84	13.14	11.37	15.79	13.68	16.59	11.17	10.60	12.36	6.79	5.80	11.50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.1	2.4	3.5	2.3	1.7	2.2	1.6	1.7	2.5	3.5	2.0	2.4	2.3	
EFFLUENT (MG/L)	1.1	1.2	2.3	1.2	1.0	1.2	1.2	1.4	1.2	1.2	1.2	1.1	1.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.40	2.41	4.87	2.84	2.43	2.78	2.84	2.89	2.54	2.47	2.32	2.20	2.82	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW

START DATE END DATE ANTICIPATED
 COMPLIANCE

1991/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ONAPING FALLS
 PLANT : LEVACK WPCP
 WORKS NUMBER : 120001194
 TREATMENT : EXTENDED AERATION
 :
 :
 DESIGN CAPACITY : 1.58 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : ONAPING RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,008

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.46	1.30	1.42	2.07	1.34	1.19	0.88	0.90	0.89	0.85	0.82	0.88	1.17	
BOD5														
INFLUENT (MG/L)	58.0	79.0	77.0	50.0	69.0	101.0	140.0	135.0	225.0	118.0	205.0	132.0	115.8	
EFFLUENT (MG/L)	9.7	5.3	4.1	3.2	5.2	4.2	3.9	3.5	3.4	3.8	5.7	9.3	5.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	14.16	6.89	5.82	6.62	6.96	4.99	3.43	3.15	3.02	3.23	4.67	8.18	5.97	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	68.0	51.0	96.0	62.0	91.0	93.0	122.0	113.0	113.0	124.0	99.0	107.0	94.9	
EFFLUENT (MG/L)	5.5	2.9	4.9	3.3	6.0	6.5	6.0	6.7	6.2	6.6	3.4	5.9	5.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8.03	3.77	6.95	6.83	8.04	7.73	5.28	6.03	5.51	5.61	2.78	5.19	6.20	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.0	7.7	4.1	2.1	4.1	5.0	5.7	6.4	7.2	5.9	6.7	4.5	5.2	
EFFLUENT (MG/L)	2.3	2.6	2.5	1.3	1.8	2.1	3.4	3.6	3.3	3.7	3.3	3.1	2.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	3.35	3.38	3.55	2.69	2.41	2.49	2.99	3.24	2.93	3.14	2.70	2.72	3.28	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
1988	1990/12	1990/12

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ONAPING FALLS
 PLANT : ONAPING WPCP
 WORKS NUMBER : 120001149
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 :
 :
 :
 DESIGN CAPACITY : 0.68 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : SWAMP TO ONAPING RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 964

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.54	0.54	0.55	0.55	0.54	0.55	0.54	0.54	0.54	0.54	0.57	0.55	0.55	
BOD5														
INFLUENT (MG/L)	67.0	111.0	50.0	70.0	142.0	165.0	105.0	63.0	110.0	70.0	124.0	253.0	110.8	
EFFLUENT (MG/L)	19.0	11.5	7.6	14.0	8.1	4.5	5.5	30.5	ND	ND	9.2	8.5	11.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.26	6.21	4.18	7.70	4.37	2.47	2.97	16.47	ND	ND	5.24	4.67	6.49	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	81.0	66.0	95.0	93.0	136.0	117.0	110.0	100.0	104.0	91.0	54.0	100.0	95.6	
EFFLUENT (MG/L)	7.0	3.6	6.7	8.6	11.7	11.1	22.1	30.0	13.6	10.5	3.9	4.0	11.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.78	1.94	3.68	4.73	6.31	6.10	11.93	16.20	7.34	5.67	2.22	2.20	6.11	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.7	5.9	3.2	3.9	5.0	11.0	6.1	5.7	7.8	6.5	4.9	5.2	5.7	
EFFLUENT (MG/L)	3.8	3.9	2.7	3.1	3.0	3.3	3.0	3.1	4.2	4.1	2.8	3.2	3.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.05	2.10	1.48	1.70	1.62	1.81	1.62	1.67	2.26	2.21	1.59	1.76	1.87	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - PHASING OUT EXISTING FACILITY

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : OPASATIKA
 PLANT : OPASATIKA LAGOON
 WORKS NUMBER : 120000658
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 1.81 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : OPASATIKA RIVER
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 600

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.11	0.11	0.16	0.19	0.17	0.20	0.10	0.13	0.13	0.07	0.15	0.10	0.14	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	160.0	280.0	ND	220.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	160.0	475.0	ND	317.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.0	10.4	ND	7.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO DISCHARGE
SS	25.0 MG/L	NO DISCHARGE
TP	1.0 MG/L	NO DISCHARGE

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PARRY SOUND
 PLANT : PARRY SOUND WPCP
 WORKS NUMBER : 110000560
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 6.59 (1000 M3)

REGION : NORTHEAST
 DISTRICT : PARRY SOUND
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MC CURRY LAKE
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 5,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	6.62	5.16	10.12	12.50	9.02	7.37	5.91	5.24	4.94	5.20	8.34	5.23	7.14	
BOD5														
INFLUENT (MG/L)	97.0	113.0	76.0	85.0	83.0	108.0	145.2	123.3	133.0	151.0	119.0	100.0	111.1	
EFFLUENT (MG/L)	6.8	3.8	2.4	5.3	3.7	6.9	8.6	4.3	3.6	3.4	8.5	6.1	5.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	45.01	19.60	24.28	66.25	33.37	50.85	50.82	22.53	17.78	17.68	70.89	31.90	37.84	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	98.0	194.0	96.0	114.0	141.0	148.0	210.8	119.9	144.0	114.0	100.0	111.0	132.6	
EFFLUENT (MG/L)	4.9	4.2	6.2	7.6	3.6	4.7	8.4	3.9	3.9	2.8	5.7	10.6	5.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	32.43	21.67	62.74	95.00	32.47	34.63	49.64	20.43	19.26	14.56	47.53	55.43	39.27	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.2	3.4	2.4	2.0	2.3	2.7	3.4	3.2	3.2	3.7	2.6	3.6	2.9	
EFFLUENT (MG/L)	0.3	0.5	0.5	0.4	0.7	0.9	0.8	0.5	0.7	0.4	0.4	0.7	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	1.98	2.58	5.06	5.00	6.31	6.63	4.72	2.62	3.45	2.08	3.33	3.66	4.28	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : POWASSAN
 PLANT : POWASSAN LAGOON
 WORKS NUMBER : 110000613
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 : REGULATED DISCHARGE VOLUME
 DESIGN CAPACITY : 0.84 (1000 M3)

REGION : NORTHEAST
 DISTRICT : PARRY SOUND
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : GENESEE CREEK
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,100

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.00	0.96	2.14	2.03	1.98	1.87	7.16	1.05	1.02	0.84	1.21	1.05	1.94	
LAGOON DISCHARGE	ND	ND	ND	ND	52.25	33.96	ND	ND	ND	ND	ND	ND	43.11	
BOD5														
INFLUENT (MG/L)	60.0	100.0	58.0	90.0	44.0	72.0	ND	ND	22.0	35.0	44.0	ND	58.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	4.9	5.7	ND	ND	ND	ND	ND	ND	5.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	9.70	10.65	ND	ND	ND	ND	ND	ND	10.28	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	85.0	95.0	75.0	75.0	75.0	50.0	ND	ND	15.0	35.0	110.0	ND	68.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	16.0	9.0	ND	ND	ND	ND	ND	ND	12.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	31.68	16.83	ND	ND	ND	ND	ND	ND	24.25	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.1	4.1	3.3	8.0	2.7	0.9	ND	ND	2.3	2.1	2.5	ND	3.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.4	1.0	ND	ND	ND	ND	ND	ND	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.79	1.87	ND	ND	ND	ND	ND	ND	1.36	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RATTER & DUNNET
 PLANT : WARREN LAGOON
 WORKS NUMBER : 110001916
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.68 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY DIST.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : VEUVE RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 612

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.30	0.25	0.31	0.30	0.29	0.33	0.28	0.28	0.34	0.34	0.28	0.36	0.31	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	137.0	65.0	62.0	52.0	81.0	112.0	122.5	108.5	61.0	93.0	182.0	72.0	95.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	93.0	75.0	80.0	108.0	68.0	93.0	132.5	60.0	38.0	95.0	135.0	40.0	84.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.2	2.6	6.7	2.9	4.8	5.1	4.6	4.8	3.0	4.5	3.4	2.1	4.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO DISCHARGE
SS	25.0 MG/L	NO DISCHARGE
TP	1.0 MG/L	NO DISCHARGE

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RAYSIDE-BALFOUR
 PLANT : AZILDA WPCP
 WORKS NUMBER : 110001783
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 2.84 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : WHITSON CREEK
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,373

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.61	1.64	2.06	3.89	3.27	2.84	1.59	1.28	1.19	1.33	1.61	1.58	1.99	
BOD5														
INFLUENT (MG/L)	110.0	135.0	113.0	ND	9.0	15.0	36.0	68.0	130.0	139.0	159.0	148.0	96.5	
EFFLUENT (MG/L)	3.3	4.0	2.7	5.8	5.9	2.1	1.7	1.7	6.6	ND	4.9	5.2	4.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.31	6.56	5.56	22.56	19.29	5.96	2.70	2.17	7.85	ND	7.88	8.21	7.96	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	82.0	76.0	110.0	41.0	31.0	55.0	97.0	75.0	106.0	120.0	127.0	85.0	83.8	
EFFLUENT (MG/L)	6.8	3.6	6.9	19.7	11.5	10.0	5.6	6.1	5.2	7.8	8.7	8.5	8.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.94	5.90	14.21	76.63	37.60	28.40	8.90	7.80	6.18	10.37	14.00	13.43	16.72	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.0	3.2	3.2	1.7	1.0	1.5	2.9	4.3	4.4	3.9	3.9	3.4	3.1	
EFFLUENT (MG/L)	0.2	0.6	0.5	0.5	0.4	0.5	0.6	0.7	ND	0.5	0.7	0.4	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.32	0.98	1.03	1.94	1.30	1.42	0.95	0.89	ND	0.66	1.12	0.63	1.00	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW

START DATE	END DATE	ANTICIPATED COMPLIANCE
1990/10	1991/01	1991/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RAYSIDE-BALFOUR
 PLANT : CHELMSFORD LAGOON
 WORKS NUMBER : 120001176
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 DESIGN CAPACITY : 0.82 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : MCKENZIE CREEK
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 8,162

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.10	1.06	1.22	2.99	1.87	2.05	ND	0.97	1.09	1.33	2.00	1.04	1.52	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	248.55	248.55	
BOD5														
INFLUENT (MG/L)	ND	ND	90.0	44.0	100.0	ND	ND	ND	78.0	110.0	144.0	105.0	95.9	
EFFLUENT (MG/L)	ND	ND	9.0	27.4	17.5	ND	ND	ND	7.0	ND	9.6	9.0	13.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	10.98	81.92	32.72	ND	ND	ND	7.63	ND	19.20	9.36	20.22	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	110.0	80.0	120.0	ND	ND	ND	30.0	120.0	188.0	110.0	108.3	
EFFLUENT (MG/L)	ND	ND	7.0	23.0	59.0	ND	ND	ND	8.0	ND	11.0	10.0	19.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	8.54	68.77	110.33	ND	ND	ND	8.72	ND	22.00	10.40	29.94	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	4.6	3.3	5.8	ND	ND	ND	4.8	7.0	7.0	6.9	5.6	
EFFLUENT (MG/L)	ND	ND	1.4	3.8	1.8	ND	ND	ND	2.0	ND	3.8	6.4	3.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	1.70	11.36	3.36	ND	ND	ND	2.18	ND	7.60	6.65	4.86	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING EVALUATED

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1988	1990/05	1990/05
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RAYSIDE-BALFOUR
 PLANT : CHELMSFORD WPCP
 WORKS NUMBER : 120001568
 TREATMENT : EXTENDED AERATION
 : CONTACT STABILIZATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 DESIGN CAPACITY : 3.06 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : WHITSON RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 4,934

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.52	3.57	5.45	7.95	4.63	5.01	2.63	2.50	2.26	2.70	2.92	3.25	3.87	
BOD5														
INFLUENT (MG/L)	83.0	100.0	106.0	34.0	52.0	35.0	157.0	57.0	68.0	120.0	174.0	181.0	97.3	
EFFLUENT (MG/L)	10.5	7.7	7.2	12.0	13.0	5.6	7.4	10.0	4.2	5.4	14.1	8.0	8.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	36.96	27.48	39.24	95.40	60.19	28.05	19.46	25.00	9.49	14.58	41.17	26.00	34.06	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	106.0	109.0	133.0	92.0	63.0	77.0	143.0	115.0	140.0	121.0	131.0	206.0	119.7	
EFFLUENT (MG/L)	6.5	7.4	11.9	12.3	13.1	5.7	4.4	7.0	6.4	5.7	5.5	4.2	7.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	22.88	26.41	64.85	97.78	60.65	28.55	11.57	17.50	14.46	15.39	16.06	13.65	29.03	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.8	7.5	4.4	3.1	3.0	3.3	4.0	4.0	5.6	4.3	4.1	5.1	4.4	
EFFLUENT (MG/L)	0.2	0.5	0.8	0.9	0.6	0.5	0.6	1.2*	1.3*	0.4	0.4	0.3	0.6	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.70	1.78	4.36	7.15	2.77	2.50	1.57	3.00	2.93	1.08	1.16	0.97	2.32	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW
 FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING EVALUATED
 FACILITY EXPANSION/UPGRADING - ASSIMILATION STUDY UNDERWAY

START DATE	END DATE	ANTICIPATED COMPLIANCE
1990/05	1991/01	1991/01
1990/05	1991/01	1991/01
1990/05	1991/01	1991/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RUTHERFORD & GEORGE JSL.
 PLANT : KILLARNEY LAGOON
 WORKS NUMBER : 110002559
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.00 (1000 M3)

REGION : NORTHEAST
 DISTRICT : MANITOULIN
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : KILLARNEY CHANNEL
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 505

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	0.11	0.18	0.22	0.16	0.15	0.15	0.15	0.13	0.12	0.11	0.10	0.14	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	114.0	135.0	37.0	25.0	ND	ND	150.0	120.0	92.0	52.0	ND	90.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	85.0	78.0	ND	30.0	ND	ND	45.0	40.0	80.0	60.0	ND	59.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	3.5	4.9	2.6	1.3	ND	ND	7.5	2.6	5.8	4.1	ND	4.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO DISCHARGE
SS	25.0 MG/L	NO DISCHARGE
TP	1.0 MG/L	NO DISCHARGE

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SAULT STE MARIE
 PLANT : SAULT STE.MARIE WPCP
 WORKS NUMBER : 110000640
 TREATMENT : PRIMARY
 :
 :
 DESIGN CAPACITY : 54.55 (1000 M3)

REGION : NORTHEAST
 DISTRICT : ALGOMA
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : ST MARY'S RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 80,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	22.57	24.31	37.64	72.82	43.06	31.43	32.30	24.09	39.45	25.32	23.83	17.89	32.89	
BOD5														
INFLUENT (MG/L)	318.0	201.0	ND	56.0	56.0	196.0	72.0	116.0	143.5	146.5	97.0	130.0	139.3	
EFFLUENT (MG/L)	69.5	86.5	ND	43.5	27.5	29.2	20.3	37.4	47.0	72.0	60.5	83.3	52.4	
LOADING (KG/D)	1568.61	2102.81	ND	3167.67	1184.15	917.75	655.69	900.96	1854.15	1823.04	1441.71	1490.23	1723.44	
PERCENT REMOVAL	78	57		22	51	85	72	68	67	51	38	36	62	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	332.0	146.0	ND	76.0	156.0	137.0	165.0	197.5	202.0	203.0	155.0	150.0	174.5	
EFFLUENT (MG/L)	40.5	56.0	ND	52.0	42.2	24.8	29.8	25.2	39.7	50.5	40.2	53.0	41.3	
LOADING (KG/D)	914.08	1361.36	ND	3786.64	1817.13	779.46	962.54	607.06	1566.16	1278.66	957.96	948.17	1358.36	
PERCENT REMOVAL	88	62		32	73	82	82	87	80	75	74	65	76	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.2	3.5	ND	1.7	2.4	3.5	4.5	3.1	5.4	2.3	2.6	2.4	3.4	
EFFLUENT (MG/L)	4.0	2.5	ND	1.0	1.4	3.9	1.3	0.7	1.2	1.0	1.5	1.3	1.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	90.28	60.77	ND	72.82	60.28	122.57	41.99	16.86	47.34	25.32	35.74	23.25	59.20	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30%	YES
SS	50%	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - START-UP DIFFICULTIES BEING CORRECTED

START DATE	END DATE	ANTICIPATED COMPLIANCE
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1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SAULT STE MARIE
 PLANT : WEST END WPCP
 WORKS NUMBER : 110002540
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 18.18 (1000 M3)

REGION : NORTHEAST
 DISTRICT : ALGOMA
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : ST MARY'S RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 80,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	6.69	5.85	8.89	15.33	7.70	8.29	6.63	6.70	7.19	6.69	8.67	6.19	7.90	
BOD5														
INFLUENT (MG/L)	128.0	216.0	ND	43.0	ND	132.0	ND	293.0	284.5	137.5	215.0	159.0	178.7	
EFFLUENT (MG/L)	12.6	10.5	ND	18.0	ND	7.9	ND	3.9	51.5	21.7	8.3	7.9	15.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	84.29	61.42	ND	275.94	ND	65.49	ND	26.13	370.28	145.17	71.96	48.90	124.82	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	212.0	199.0	176.0	80.0	1,630.0	178.0	ND	571.0	281.3	225.0	174.0	143.0	351.8	
EFFLUENT (MG/L)	2.7	4.0	29.3	9.0	15.3	4.8	15.0	11.6	51.0	15.5	9.3	5.0	14.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	18.06	23.40	260.47	137.97	117.81	39.79	99.45	77.72	366.69	103.69	80.63	30.95	113.76	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.9	5.3	7.1	2.2	5.6	5.5	ND	7.7	7.7	4.1	2.7	3.5	5.1	
EFFLUENT (MG/L)	1.0	0.8	0.7	0.4	0.8	0.7	1.0	0.6	1.3*	0.9	0.6	0.4	0.8	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	6.69	4.68	6.22	6.13	6.16	5.80	6.63	4.02	9.34	6.02	5.20	2.47	6.32	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

EQUIPMENT/MAINTENANCE - EXISTING EQUIPMENT BEING REPAIRED

START DATE END DATE ANTICIPATED
 COMPLIANCE

1989/09

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SMOOTH ROCK FALLS
 PLANT : SMOOTH ROCK FALLS WPCP
 WORKS NUMBER : 110002130
 TREATMENT : EXTENDED AERATION
 :
 :
 :
 DESIGN CAPACITY : 1.63 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MATTAGAMI RIVER
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 2,251

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.37	1.38	1.57	162.00	2.84	1.69	1.36	1.45	1.34	1.76	1.85	1.19	14.98	
BOD5														
INFLUENT (MG/L)	94.0	61.0	69.0	40.0	7.0	29.0	69.0	48.0	122.0	55.0	62.0	110.0	63.8	
EFFLUENT (MG/L)	3.3	3.9	2.9	2.4	3.4	2.0	1.5	2.2	1.5	2.0	1.8	2.7	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.52	5.38	4.55	388.80	9.65	3.38	2.04	3.19	2.01	3.52	3.33	3.21	37.45	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	63.0	60.0	70.0	65.0	9.0	20.0	40.0	30.0	73.0	65.0	88.0	140.0	60.3	
EFFLUENT (MG/L)	6.0	6.0	ND	ND	ND	ND	ND	6.0	1.2	6.5	6.0	5.0	5.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8.22	8.28	ND	ND	ND	ND	ND	8.70	1.60	11.44	11.10	5.95	77.90	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.6	3.9	193.1	2.2	6.7	3.2	9.4	3.9	5.7	3.5	4.0	6.5	20.6	
EFFLUENT (MG/L)	3.3	3.7	3.2	1.3	0.9	1.8	2.6	2.0	2.7	2.2	1.7	3.4	2.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	4.52	5.10	5.02	210.60	2.55	3.04	3.53	2.90	3.61	3.87	3.14	4.04	35.95	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	INSUFFICIENT DATA
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : STURGEON FALLS
 PLANT : STURGEON FALLS WPCP
 WORKS NUMBER : 110001435
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 4.54 (1000 M3)

REGION : NORTHEAST
 DISTRICT : NIPPISSING
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : STURGEON RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 6,040

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.23	5.20	6.71	9.06	7.40	6.13	5.11	5.03	4.46	4.85	5.67	5.20	5.84	
BOD5														
INFLUENT (MG/L)	74.0	75.0	92.0	53.0	60.0	66.0	105.0	65.0	81.0	101.0	88.0	98.0	79.8	
EFFLUENT (MG/L)	4.3	6.0	11.5	4.4	5.2	10.7	3.4	3.1	4.5	3.7	4.3	5.0	5.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	22.48	31.20	77.16	39.86	38.48	65.59	17.37	15.59	20.07	17.94	24.38	26.00	32.12	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	87.0	77.0	115.0	238.0	70.0	95.0	76.7	80.4	78.0	123.0	79.0	96.0	101.3	
EFFLUENT (MG/L)	6.8	6.5	14.7	8.5	7.1	6.2	6.5	5.4	4.7	7.7	4.3	10.8	7.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	35.56	33.80	98.63	77.01	52.54	38.00	33.21	27.16	20.96	37.34	24.38	56.16	43.22	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.9	3.8	4.2	2.7	2.5	ND	4.4	4.4	4.0	5.1	3.3	4.2	3.9	
EFFLUENT (MG/L)	0.6	0.8	1.1*	0.4	0.4	0.6	1.3*	1.4*	1.3*	0.9	0.6	0.8	0.9	4
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	3.13	4.16	7.38	3.62	2.96	3.67	6.64	7.04	5.79	4.36	3.40	4.16	5.26	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - MONITORING PROCEDURES BEING UPGRADED
 OPERATIONAL/PROCESS - PROCESS CONTROL BEING UPGRADED

START DATE END DATE ANTICIPATED
 COMPLIANCE

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : SUDBURY
 PLANT : SUDBURY WPCP
 WORKS NUMBER : 110000711
 TREATMENT : HIGH RATE
 :
 :
 DESIGN CAPACITY : 68.19 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : JUNCTION CREEK
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 95,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	58.98	56.67	58.99	84.47	66.71	69.36	55.06	55.54	53.13	53.50	58.13	54.45	60.42	
BOD5														
INFLUENT (MG/L)	91.0	76.0	71.0	34.0	46.0	61.0	73.0	64.0	84.0	77.0	79.0	96.0	71.0	
EFFLUENT (MG/L)	24.0	26.5	13.3	9.8	3.6	9.8	8.6	4.8	3.9	9.0	36.0	39.5	15.7	
CONCENTRATION LIMIT (MG/L)													20.0	
LOADING (KG/D)	1415.52	1501.75	784.56	827.80	240.15	679.72	473.51	266.59	207.20	481.50	2092.68	2150.77	948.59	
LOADING LIMIT (KG/D)														
SUSPENDED SOLIDS														
INFLUENT (MG/L)	61.0	64.0	83.0	61.0	57.0	71.0	61.0	51.0	72.0	69.0	85.0	75.0	67.5	
EFFLUENT (MG/L)	10.9	10.3	10.4	14.1	10.9	11.2	10.1	12.0	9.5	17.9	10.0	21.5	12.4	
CONCENTRATION LIMIT (MG/L)													20.0	
LOADING (KG/D)	642.88	583.70	613.49	1191.02	727.13	776.83	556.10	666.48	504.73	957.65	581.30	1170.67	749.21	
LOADING LIMIT (KG/D)														
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.7	3.6	2.7	1.8	2.1	1.9	2.0	2.5	2.0	3.0	2.7	3.1	2.5	
EFFLUENT (MG/L)	1.0	0.9	0.9	0.5	0.6	0.5	0.6	0.7	0.9	0.8	0.8	1.0	0.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	58.98	51.00	53.09	42.23	40.02	34.68	33.03	38.87	47.81	42.80	46.50	54.45	48.34	
LOADING LIMIT (KG/D)														

SUMMARY

PARAM	CRITERIA	LOADING	COMPLIES WITH CONC	LOADING
BOD	20.0 MG/L	NA	YES	NA
SS	20.0 MG/L	NA	YES	NA
TP	NA	NA	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING EVALUATED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1990/08	1991/01	1991/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SUDBURY
 PLANT : SUDBURY WPCP
 WORKS NUMBER : 110000711
 TREATMENT : HIGH RATE
 :
 :
 DESIGN CAPACITY : 68.19 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : JUNCTION CREEK
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 95,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	58.98	56.67	58.99	84.47	66.71	69.36	55.06	55.54	53.13	53.50	58.13	54.45	60.42	
BOD5														
INFLUENT (MG/L)	91.0	76.0	71.0	34.0	46.0	61.0	73.0	64.0	84.0	77.0	79.0	96.0	71.0	
EFFLUENT (MG/L)	24.0	26.5	13.3	9.8	3.6	9.8	8.6	4.8	3.9	9.0	36.0	39.5	15.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1415.52	1501.75	784.56	827.80	240.15	679.72	473.51	266.59	207.20	481.50	2092.68	2150.77	948.59	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	61.0	64.0	83.0	61.0	57.0	71.0	61.0	51.0	72.0	69.0	85.0	75.0	67.5	
EFFLUENT (MG/L)	10.9	10.3	10.4	14.1	10.9	11.2	10.1	12.0	9.5	17.9	10.0	21.5	12.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	642.88	583.70	613.49	1191.02	727.13	776.83	556.10	666.48	504.73	957.65	581.30	1170.67	749.21	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.7	3.6	2.7	1.8	2.1	1.9	2.0	2.5	2.0	3.0	2.7	3.1	2.5	
EFFLUENT (MG/L)	1.0	0.9	0.9	0.5	0.6	0.5	0.6	0.7	0.9	0.8	0.8	1.0	0.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	58.98	51.00	53.09	42.23	40.02	34.68	33.03	38.87	47.81	42.80	46.50	54.45	48.34	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING EVALUATED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1990/08	1991/01	1991/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SUNDRIDGE
 PLANT : SUNDRIDGE LAGOON
 WORKS NUMBER : 110001961
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.65 (1000 M3)

REGION : NORTHEAST
 DISTRICT : PARRY SOUND
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BERNARD CREEK
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 740

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.46	0.45	0.55	0.70	0.63	0.61	0.53	0.49	0.44	0.44	0.50	0.46	0.52	
LAGOON DISCHARGE	ND	ND	ND	ND	77.89	98.14	ND	ND	ND	ND	ND	ND	88.02	
BOD5														
INFLUENT (MG/L)	55.0	131.0	ND	52.0	22.0	70.0	140.0	205.0	120.0	89.0	ND	ND	98.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	6.1	8.6	ND	ND	ND	ND	ND	ND	7.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	3.84	5.24	ND	ND	ND	ND	ND	ND	3.85	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	50.0	55.0	ND	60.0	20.0	45.0	55.0	110.0	65.0	68.0	ND	ND	58.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	25.0	18.8	ND	ND	ND	ND	ND	ND	21.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	15.75	11.46	ND	ND	ND	ND	ND	ND	11.39	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.6	6.5	ND	6.2	1.9	1.2	7.5	10.4	5.8	5.4	ND	ND	5.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	1.0	0.8	ND	ND	ND	ND	ND	ND	0.9	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.63	0.48	ND	ND	ND	ND	ND	ND	0.47	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TEMAGAMI
 PLANT : NORTH GOWARD LAGOON
 WORKS NUMBER : 120000783
 TREATMENT : AERATED CELL PLUS LAGOON
 : REGULATED DISCHARGE VOLUME
 : EFFLUENT POLISHING
 DESIGN CAPACITY : 0.39 (1000 M3)

REGION : NORTHEAST
 DISTRICT : NIPPISSING
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : NET LAKE
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 350

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.03	0.31	0.51	0.06	0.33	0.41	0.39	0.35	0.20	0.17	0.20	0.19	0.26	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	52.0	35.0	82.0	22.0	30.0	22.0	22.0	114.0	36.0	41.0	140.0	155.0	62.6	
EFFLUENT (MG/L)	6.5	6.5	6.8	8.0	16.0	8.5	ND	41.0	4.2	33.0	19.0	4.5	14.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	0.19	2.01	3.46	0.48	5.28	3.48	ND	14.35	0.84	5.61	3.80	0.85	3.64	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	30.0	30.0	60.0	75.0	70.0	8.0	30.0	75.0	50.0	ND	150.0	420.0	90.7	
EFFLUENT (MG/L)	3.0	5.0	5.0	10.0	20.0	10.0	10.0	50.0	8.0	25.0	35.0	20.0	16.8	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	0.09	1.55	2.55	0.60	6.60	4.10	3.90	17.50	1.60	4.25	7.00	3.80	4.37	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.5	4.6	2.2	1.4	1.9	1.8	1.8	7.1	4.0	2.3	5.6	3.5	3.2	
EFFLUENT (MG/L)	2.4	3.1	3.2	0.9	1.3	1.0	1.0	2.4	1.9	2.2	2.8	0.7	1.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.07	0.96	1.63	0.05	0.42	0.41	0.39	0.84	0.38	0.37	0.56	0.13	0.49	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TEMAGAMI
 PLANT : TEMAGAMI LAGOON
 WORKS NUMBER : 110002327
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.11 (1000 M3)

REGION : NORTHEAST
 DISTRICT : NIPPISSING
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : SNAKE ISLAND LAKE
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 440

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO DISCHARGE
SS	25.0 MG/L	NO DISCHARGE
TP	1.0 MG/L	NO DISCHARGE

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE

START DATE END DATE ANTICIPATED
 COMPLIANCE

1989/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : THESSALON
 PLANT : THESSALON LAGOON
 WORKS NUMBER : 110002434
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 DESIGN CAPACITY : 1.23 (1000 M3)

REGION : NORTHEAST
 DISTRICT : ALGOMA
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : THESSALON RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,600

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.08	1.09	1.23	1.92	1.33	1.12	1.17	1.14	1.02	1.01	1.03	0.95	1.17	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	345.00	ND	345.00	
BOD5														
INFLUENT (MG/L)	53.0	42.0	40.0	32.0	49.0	30.0	11.0	17.0	50.0	24.0	40.0	ND	35.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.1	ND	8.1	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.34	ND	9.48	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	29.0	45.0	33.0	50.0	45.0	25.0	20.0	40.0	100.0	30.0	50.0	ND	42.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.2	ND	9.2	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.47	ND	10.76	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.5	4.5	2.6	2.9	2.7	6.4	2.4	2.5	3.1	3.2	3.5	ND	3.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	1.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.85	ND	2.11	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TIMMINS
 PLANT : BOB'S LAKE LAGOON
 WORKS NUMBER : 120000275
 TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
 :
 :
 :
 DESIGN CAPACITY : 0.58 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : BOB'S CK TO PORCUPINE L.
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 170

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	255.0	860.0	150.0	62.0	54.0	96.0	95.0	84.0	40.0	34.0	100.0	ND	166.4	
EFFLUENT (MG/L)	49.0	70.0	84.0	54.0	15.0	12.0	11.0	23.0	13.0	8.4	16.0	ND	32.3*	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	300.0	2,160.0	37.0	110.0	100.0	260.0	95.0	130.0	60.0	60.0	140.0	ND	313.8	
EFFLUENT (MG/L)	35.0	25.0	30.0	25.0	20.0	50.0	4.0	20.0	10.0	7.0	25.0	ND	22.8	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	13.7	26.0	15.0	3.7	5.7	5.3	4.1	5.2	3.4	4.9	3.2	ND	8.2	
EFFLUENT (MG/L)	6.3	7.0	8.3	4.7	2.0	2.5	2.1	2.2	3.6	3.5	3.5	ND	4.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	NO
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

NO ACTION - FUNDING APPLICATION REJECTED

START DATE END DATE ANTICIPATED
 COMPLIANCE

1992

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TIMMINS
 PLANT : MATTAGAMI WPCP
 WORKS NUMBER : 110000766
 TREATMENT : PRIMARY
 :
 :
 DESIGN CAPACITY : 34.09 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : MATTAGAMI RIVER
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 33,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	15.60	15.00	17.00	26.20	29.20	24.00	21.30	24.10	18.60	18.40	19.30	15.60	20.36	
BOD5														
INFLUENT (MG/L)	80.0	98.0	98.0	72.0	62.0	56.0	27.0	46.0	66.0	72.0	84.0	128.0	74.1	
EFFLUENT (MG/L)	78.0	68.0	67.0	24.0	30.0	43.0	30.0	13.0	15.0	41.0	32.0	67.0	42.3	
LOADING (KG/D)	1216.80	1020.00	1139.00	628.80	876.00	1032.00	639.00	313.30	279.00	754.40	617.60	1045.20	861.23	
PERCENT REMOVAL	03	31	32	67	52	23	ND	72	77	43	62	48	43	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	127.0	191.0	157.0	113.0	167.0	132.0	180.0	104.0	172.0	163.0	191.0	159.0	154.7	
EFFLUENT (MG/L)	54.5	40.6	43.0	27.0	45.2	39.3	33.5	28.2	38.3	40.3	55.0	41.1	40.5	
LOADING (KG/D)	850.20	609.00	731.00	707.40	1319.84	943.20	713.55	679.62	712.38	741.52	1061.50	641.16	824.58	
PERCENT REMOVAL	57	79	73	76	73	70	81	73	78	75	71	74	74	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.2	5.1	7.2	3.6	4.9	3.8	3.7	2.9	4.2	4.2	41.0	4.7	7.5	
EFFLUENT (MG/L)	3.7	3.1	3.8	1.1	ND	ND	1.1	7.3	0.7	1.1	7.3	2.4	3.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	57.72	46.50	64.60	28.82	ND	ND	23.43	175.93	13.02	20.24	140.89	37.44	65.15	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30%	YES
SS	50%	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TIMMINS
 PLANT : WHITNEY & TISDALE WPCP
 WORKS NUMBER : 110001391
 TREATMENT : CONTACT STABILIZATION
 :
 :
 :
 DESIGN CAPACITY : 6.81 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : PORCUPINE RIVER
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 7,300

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.66	2.55	3.29	7.03	6.44	4.93	3.66	4.63	3.39	3.52	4.08	2.67	4.07	
BOD5														
INFLUENT (MG/L)	56.0	92.0	82.0	114.0	56.0	80.0	24.0	32.0	115.0	84.0	82.0	94.0	75.9	
EFFLUENT (MG/L)	16.0	13.0	13.0	8.6	9.8	3.2	1.6	9.2	7.0	2.5	3.0	14.0	8.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	42.56	33.15	42.77	60.45	63.11	15.77	5.85	42.59	23.73	8.80	12.24	37.38	34.19	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	50.0	50.0	90.0	150.0	90.0	95.0	15.0	40.0	65.0	100.0	150.0	70.0	80.4	
EFFLUENT (MG/L)	15.0	10.0	10.0	10.0	15.0	10.0	7.0	7.0	8.0	5.2	8.0	7.0	9.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	39.90	25.50	32.90	70.30	96.60	49.30	25.62	32.41	27.12	18.30	32.64	18.69	38.26	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.4	4.5	6.4	4.9	3.4	4.6	2.2	2.0	4.4	6.6	4.6	6.2	4.4	
EFFLUENT (MG/L)	8.0	4.1	7.3	2.0	1.5	2.3	1.8	2.6	2.4	3.6	3.0	3.9	3.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	21.28	10.45	24.01	14.06	9.66	11.33	6.58	12.03	8.13	12.67	12.24	10.41	14.25	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : VAL RITA-HARTY
 PLANT : HARTY LAGOON
 WORKS NUMBER : 120003316
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.09 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : NO NAME CREEK
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 140

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.20	
LAGOON DISCHARGE	ND	ND	ND	ND	10.20	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	110.0	165.0	220.0	130.0	135.0	80.0	ND	285.0	180.0	143.0	125.0	225.0	163.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	5.4	ND	ND	ND	ND	3.2	ND	ND	4.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	140.0	130.0	130.0	130.0	130.0	95.0	ND	200.0	160.0	340.0	270.0	130.0	168.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	15.0	ND	ND	ND	ND	14.7	ND	ND	14.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.7	7.5	12.0	4.8	5.2	3.9	ND	25.5	7.3	6.6	4.7	6.2	8.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	2.0*	ND	ND	ND	ND	0.6	ND	ND	1.3	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : VAL-RITA-HARTY
 PLANT : VAL-RITA LAGOON
 WORKS NUMBER : 110002318
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 : PHOSPHORUS REMOVAL - BATCH
 :
 DESIGN CAPACITY : 0.53 (1000 M3)

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : UNNAMED CK.TO KAPUSK.RIV
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 580

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	10.20	ND	ND	ND	ND	ND	ND	ND	10.20	
BOD5														
INFLUENT (MG/L)	165.0	100.0	275.0	22.0	ND	44.0	ND	90.0	150.0	116.0	240.0	245.0	144.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	6.7	ND	ND	ND	ND	1.3	ND	ND	4.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	180.0	420.0	340.0	55.0	ND	90.0	ND	110.0	120.0	260.0	340.0	330.0	224.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	16.7	ND	ND	ND	ND	5.5	ND	ND	11.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.1	5.1	9.8	2.0	ND	3.2	ND	5.6	6.5	6.7	8.0	7.7	6.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.5	ND	ND	ND	ND	0.1	ND	ND	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : VALLEY EAST
 PLANT : HAMNER, VAL-CARON, VAL-THERESE WPCP
 WORKS NUMBER : 110001541
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 11.36 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : VERMILION RIVER
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 17,337

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	7.87	7.35	8.11	16.83	9.89	10.00	5.12	5.17	5.19	6.00	6.77	5.54	7.82	
<u>BOD5</u>														
INFLUENT (MG/L)	100.0	132.0	127.0	36.0	64.0	49.0	ND	79.0	172.0	95.0	135.0	137.0	102.4	
EFFLUENT (MG/L)	5.8	5.5	4.7	10.9	13.0	18.2	ND	7.8	13.3	7.0	15.8	10.6	10.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	45.64	40.42	38.11	183.44	128.57	182.00	ND	40.32	69.02	42.00	106.96	58.72	79.76	
<u>SUSPENDED SOLIDS</u>														
INFLUENT (MG/L)	155.0	154.0	135.0	98.0	106.0	110.0	101.0	129.0	176.0	155.0	147.0	102.0	130.7	
EFFLUENT (MG/L)	3.2	2.7	4.0	15.6	9.5	6.8	4.7	4.4	5.2	6.4	4.8	2.4	5.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	25.18	19.84	32.44	262.54	93.95	68.00	24.06	22.74	26.98	38.40	32.49	13.29	45.36	
<u>TOTAL PHOSPHOROUS</u>														
INFLUENT (MG/L)	4.3	5.0	6.2	3.5	3.8	3.8	5.6	5.7	5.7	5.7	4.0	4.0	4.8	
EFFLUENT (MG/L)	0.5	0.5	0.5	0.8	0.5	0.5	0.8	0.9	0.8	0.5	0.6	0.6	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	3.93	3.67	4.05	13.46	4.94	5.00	4.09	4.65	4.15	3.00	4.06	3.32	4.69	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WALDEN
 PLANT : LIVELY WPCP
 WORKS NUMBER : 120001185
 TREATMENT : EXTENDED AERATION
 :
 :
 DESIGN CAPACITY : 1.59 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : MEATBIRD CREEK
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 3,669

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.32	1.18	1.42	1.81	1.65	1.70	1.37	1.53	1.33	1.36	1.57	1.50	1.48	
BOD5														
INFLUENT (MG/L)	168.0	119.0	120.0	56.0	65.0	63.0	65.0	86.0	87.0	468.0	91.0	60.0	120.7	
EFFLUENT (MG/L)	7.3	6.1	9.6	8.1	7.9	3.5	2.3	15.9	3.0	5.5	15.7	11.0	8.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.63	7.19	13.63	14.66	13.03	5.95	3.15	24.32	3.99	7.48	24.64	16.50	11.84	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	126.0	111.0	121.0	83.0	112.0	124.0	82.0	100.0	122.0	384.0	136.0	134.0	136.3	
EFFLUENT (MG/L)	3.6	2.1	8.9	7.7	5.5	2.6	2.6	2.7	5.7	10.2	9.5	7.3	5.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.75	2.47	12.63	13.93	9.07	4.42	3.56	4.13	7.58	13.87	14.91	10.95	8.44	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.6	7.1	5.7	3.3	5.0	3.5	4.5	5.7	6.6	9.4	5.7	2.7	5.4	
EFFLUENT (MG/L)	3.3	3.9	2.7	1.4	2.6	2.6	3.1	3.0	3.3	3.2	2.7	3.1	2.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	4.35	4.60	3.83	2.53	4.29	4.42	4.24	4.59	4.38	4.35	4.23	4.65	4.29	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1990/10	1991/01	1991/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WALDEN
 PLANT : MIKKOLA WPCP
 WORKS NUMBER : 120001531
 TREATMENT : EXTENDED AERATION
 :
 :
 DESIGN CAPACITY : 4.36 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY, REG. MUN.
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : JUNCTION CREEK
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,693

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.77	1.72	2.52	3.09	1.94	1.84	1.33	1.33	1.34	1.33	1.60	2.25	1.84	
BOD5														
INFLUENT (MG/L)	49.0	64.0	44.0	21.0	34.0	52.0	70.0	84.0	95.0	86.0	180.0	81.0	71.7	
EFFLUENT (MG/L)	9.0	12.0	12.5	6.2	5.6	4.8	2.6	7.0	2.1	3.4	8.3	5.3	6.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	15.93	20.64	31.50	19.15	10.86	8.83	3.45	9.31	2.81	4.52	13.28	11.92	12.14	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	74.0	94.0	68.0	59.0	74.0	95.0	120.0	121.0	126.0	158.0	103.0	65.0	96.4	
EFFLUENT (MG/L)	7.3	10.0	13.5	8.6	5.2	3.8	4.3	6.6	7.3	11.5	18.4	11.6	9.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	12.92	17.20	34.02	26.57	10.08	6.99	5.71	8.77	9.78	15.29	29.44	26.10	16.56	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.6	4.6	2.9	1.4	3.1	4.1	6.3	5.8	6.7	7.8	3.6	4.3	4.5	
EFFLUENT (MG/L)	3.1	3.5	2.1	1.3	2.6	2.8	4.0	4.6	1.4	1.1	1.0	0.7	2.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	5.48	6.02	5.29	4.01	5.04	5.15	5.32	6.11	1.87	1.46	1.60	1.57	4.42	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED

START DATE	END DATE	ANTICIPATED COMPLIANCE
1989/09	1990/04	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WEBBWOOD
 PLANT : WEBBWOOD LAGOON
 WORKS NUMBER : 110001881
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 :
 DESIGN CAPACITY : 0.34 (1000 M3)

REGION : NORTHEAST
 DISTRICT : SUDBURY DIST.
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : GOUGH CREEK
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 460

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.10	0.10	0.16	0.17	0.11	0.12	0.10	0.09	0.10	0.09	0.09	0.09	0.11	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	165.0	183.0	73.0	51.0	81.0	143.0	108.0	190.0	155.0	124.0	190.0	365.0	152.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	9.2	7.0	1.2	12.3	27.0	ND	11.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	0.92	0.63	0.12	1.10	2.43	ND	1.24	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	103.0	145.0	85.0	53.0	63.0	93.0	53.0	100.0	65.0	113.0	130.0	160.0	96.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	10.5	15.0	10.0	37.5	30.0	ND	20.6	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	1.05	1.35	1.00	3.37	2.70	ND	2.27	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.4	15.5	5.5	4.4	7.7	11.5	7.2	15.1	10.2	10.2	11.8	14.4	10.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	5.4	5.0	5.8	3.9	2.5	ND	4.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	0.54	0.45	0.58	0.35	0.22	ND	0.50	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WHITE RIVER
 PLANT : WHITE RIVER LAGOON
 WORKS NUMBER : 110002522
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 :
 DESIGN CAPACITY : 0.00 (1000 M3)

REGION : NORTHEAST
 DISTRICT : ALGOMA
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : SMALL CR.TO WHITE RIVER
 MINOR BASIN : SUPERIOR
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.64	0.62	0.59	0.55	0.84	0.60	0.50	0.56	0.63	0.59	0.69	0.67	0.62	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

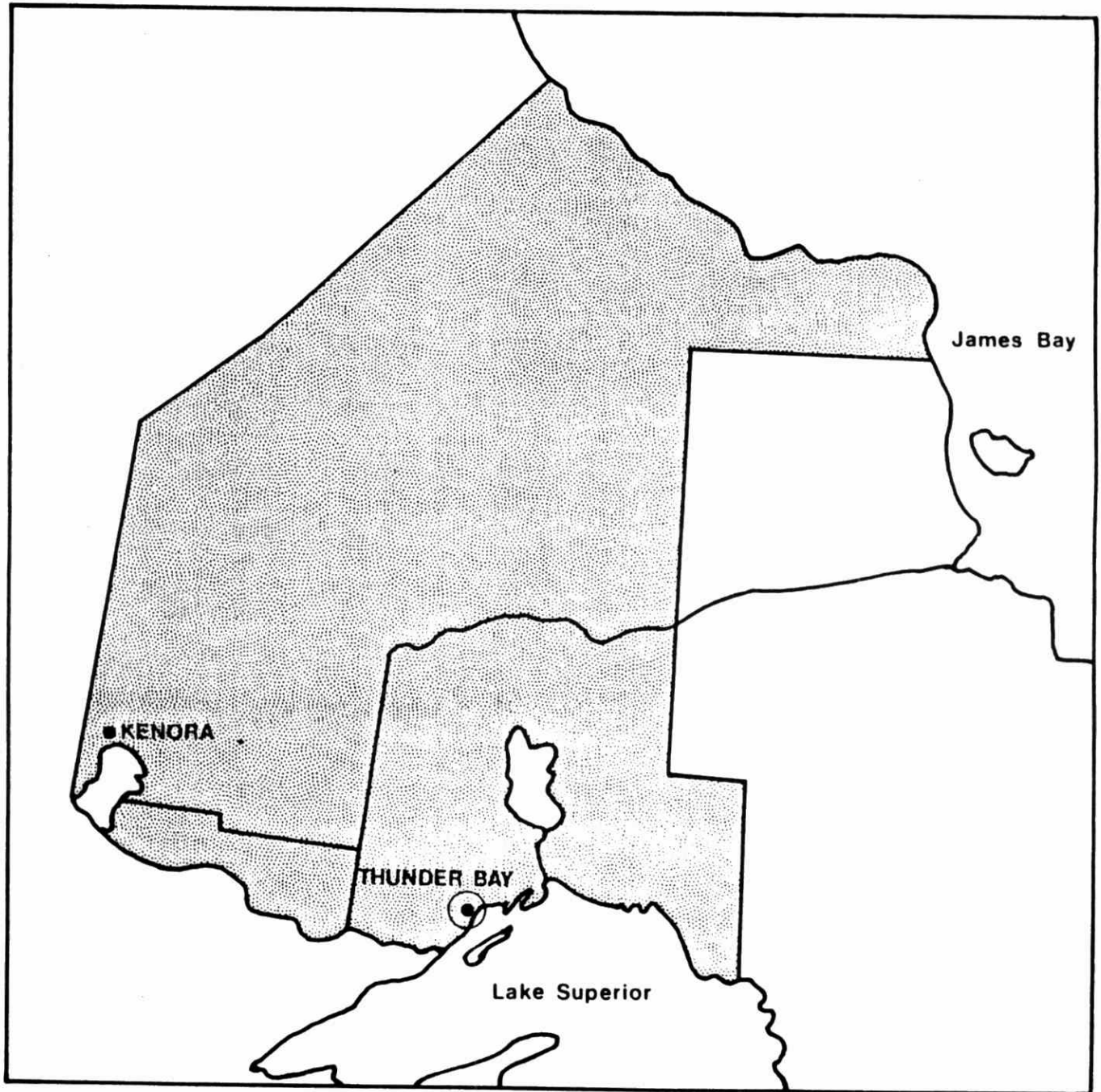
SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	NO DISCHARGE
SS	40.0 MG/L	NO DISCHARGE
TP	NA	NO DISCHARGE

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED



Northwestern Region

⑥



Ministry
of the
Environment

REGIONAL OFFICE

Thunder Bay
435 James St. South
P.O. Box 5000
P7C 5G8
(807) 475-1205

DISTRICT OFFICES

Kenora
808 Robertson St.
P9N 1X9
(807) 468-5578

Thunder Bay
435 James St. South
P.O. Box 5000
P7C 5G8
(807) 475-1315

NORTHWEST SUMMARY - 1989

Treatment Type	Number			Design Capacity (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Primary	1	3	4	9.09	112.01	121.11
Conventional Activated Sludge	0	1	1	-	2.27	2.27
Contact Stabilization	1	2	3	2.45	25.00	27.45
Extended Aeration	10	1	11	23.13	0.55	23.68
Communal Septic Tank	1	0	1	0.27	-	0.27
Aerated Lagoon	0	1	1	-	4.10	4.10
Conventional Lagoon Seasonal	3	0	3	2.03	-	2.03
Exfiltration Lagoon	1	2	3	1.36	1.36	2.72
TOTALS	17	10	27	38.33	145.29	183.62

1000M3/D: Thousands of cubic meters per day

ADF: Average Daily Flow

NORTHWEST SUMMARY - 1989

Treatment Type	Number			Annual ADF (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Primary	1	3	3	7.35	80.71	88.06
Conventional Activated Sludge	0	1	1	0.00	1.78	1.78
Contact Stabilization	1	2	3	2.10	14.99	17.09
Extended Aeration	10	1	11	14.16	0.26	14.42
Communal Septic Tank	1	0	1	0.10	0.00	0.10
Aerated Lagoon	0	1	1	0.00	3.08	3.08
Conventional Lagoon Seasonal	3	0	3	1.63	0.00	1.63
Exfiltration Lagoon	1	2	3	0.24	0.00	0.24
TOTALS	17	10	27	25.58	100.82	126.40

1000M3/D: Thousands of cubic meters per day
 ADF: Average Daily Flow

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ATIKOKAN
 PLANT : ATIKOKAN WPCP
 WORKS NUMBER : 110001523
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 4.08 (1000 M3)

REGION : NORTHWEST
 DISTRICT : RAINY RIVER
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : ATIKOKAN RIVER
 MINOR BASIN : LAKE WINNIPEG EAST
 MAJOR BASIN : NELSON RIVER
 POPULATION SERVED : 4,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.42	2.68	2.95	4.89	3.25	3.39	2.79	2.56	3.07	2.56	2.12	1.94	2.89	
BOD5														
INFLUENT (MG/L)	70.0	65.0	62.0	52.0	44.0	38.0	65.0	45.0	69.0	45.0	80.0	112.0	62.3	
EFFLUENT (MG/L)	3.5	8.7	7.7	2.6	3.2	2.0	1.5	5.2	1.9	2.0	2.2	8.7	4.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8.47	23.31	22.71	12.71	10.40	6.78	4.18	13.31	5.83	5.12	4.66	16.87	11.85	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	87.0	80.0	132.0	100.0	66.0	50.0	48.0	43.0	63.0	60.0	93.0	130.0	79.3	
EFFLUENT (MG/L)	17.5	35.0	43.2	25.0	23.3	8.5	6.0	7.5	12.5	10.0	12.0	10.9	17.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	42.35	93.80	127.44	122.25	75.72	28.81	16.74	19.20	38.37	25.60	25.44	21.14	50.86	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.3	2.8	2.8	2.9	2.5	2.3	3.6	2.8	3.3	3.1	3.5	3.9	3.1	
EFFLUENT (MG/L)	0.6	1.1*	1.1*	0.7	0.7	0.3	0.3	0.3	0.5	0.5	0.5	0.7	0.6	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.45	2.94	3.24	3.42	2.27	1.01	0.83	0.76	1.53	1.28	1.06	1.35	1.73	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW
 COLLECTION SYSTEM - INFILTRATION PROBLEMS BEING CORRECTED
 OPERATIONAL/PROCESS - SAMPLING PROGRAM BEING MODIFIED
 SLUDGE DISPOSAL/REMOVAL - UPGRADING SLUDGE STORAGE FACILITIES
 FACILITY EXPANSION/UPGRADING - UPGRADING SECONDARY CLARIFIERS

START DATE	END DATE	ANTICIPATED COMPLIANCE
1991	1990	
1989	1989	1990
1989	1989	1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ATWOOD
 PLANT : RAINY RIVER LAGOON
 WORKS NUMBER : 110002292
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 DESIGN CAPACITY : 0.99 (1000 M3)

REGION : NORTHWEST
 DISTRICT : RAINY RIVER
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : RAINY RIVER
 MINOR BASIN : LAKE WINNIPEG EAST
 MAJOR BASIN : NELSON RIVER
 POPULATION SERVED : 975

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.51	0.52	0.63	1.14	0.69	1.07	1.00	1.00	0.53	0.49	0.57	0.57	0.73	
LAGOON DISCHARGE	ND	ND	ND	ND	54.64	80.44	ND	ND	18.75	23.88	42.65	ND	44.07	
BOD5														
INFLUENT (MG/L)	99.0	165.0	67.0	83.0	111.0	67.0	56.0	56.0	96.0	106.0	183.0	140.0	102.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	9.8	9.0	ND	ND	3.9	2.0	4.8	ND	5.9	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	6.76	9.63	ND	ND	2.06	0.98	2.73	ND	4.31	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	120.0	140.0	100.0	100.0	245.0	85.0	50.0	50.0	95.0	110.0	125.0	180.0	116.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	14.6	15.4	ND	ND	3.3	1.7	3.8	ND	7.8	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	10.07	16.47	ND	ND	1.74	0.83	2.16	ND	5.69	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.9	5.8	3.3	3.6	5.4	3.6	3.3	3.3	3.5	6.0	5.1	4.6	4.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	1.4	1.7	ND	ND	0.3	0.3	1.3	ND	1.0	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.96	1.81	ND	ND	0.15	0.14	0.74	ND	0.73	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW

START DATE END DATE ANTICIPATED
 COMPLIANCE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BEARDMORE
PLANT : BEARDMORE LAGOON
WORKS NUMBER : 110002309
TREATMENT : EXFILTRATION LAGOON

DESIGN CAPACITY : 1.36 (1000 M3)

REGION : NORTHWEST
DISTRICT : THUNDER BAY
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : NO DISC.TO SURFACE WATER
MINOR BASIN : SUPERIOR
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 570

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.20	0.20	0.19	0.25	0.44	0.29	ND	0.22	0.20	0.20	0.21	0.22	0.24	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	145.0	126.0	138.0	140.0	42.0	34.0	ND	155.0	130.0	125.0	210.0	170.0	128.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	110.0	95.0	80.0	100.0	70.0	90.0	ND	90.0	100.0	100.0	100.0	90.0	93.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	7.5	6.1	6.3	1.9	2.0	ND	6.5	7.5	10.9	6.7	7.0	6.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:

BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CARAMAT
 PLANT : CARAMAT
 WORKS NUMBER : 120003085
 TREATMENT : EXFILTRATION LAGOON
 : EXFILTRATION
 :
 DESIGN CAPACITY : 0.05 (1000 M3)

REGION : NORTHWEST
 DISTRICT : THUNDER BAY
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : NO DISC.TO SURFACE WATER
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 125

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DISCHARGE
SS	NA	NO DISCHARGE
TP	NA	NO DISCHARGE

NOTE:

BOD - HAS NO CRITERIA
 SS - HAS NO CRITERIA
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DRYDEN
 PLANT : DRYDEN WPCP
 WORKS NUMBER : 120000248
 TREATMENT : CONTACT STABILIZATION
 :
 :
 :
 DESIGN CAPACITY : 6.81 (1000 M3)

REGION : NORTHWEST
 DISTRICT : KENORA
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : WABIGOON RIVER
 MINOR BASIN : LAKE WINNIPEG EAST
 MAJOR BASIN : NELSON RIVER
 POPULATION SERVED : 6,900

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.19	3.38	3.50	5.62	4.50	5.49	4.83	4.56	3.64	3.55	3.23	3.15	4.05	
BOD5														
INFLUENT (MG/L)	130.0	123.0	120.0	95.0	88.0	112.0	84.0	86.0	120.0	78.0	190.0	72.0	108.2	
EFFLUENT (MG/L)	9.3	15.0	12.0	17.0	14.0	6.4	8.4	6.7	4.3	2.9	4.4	9.0	9.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	29.66	50.70	42.00	95.54	63.00	35.13	40.57	30.55	15.65	10.29	14.21	28.35	36.86	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	160.0	130.0	130.0	210.0	110.0	130.0	70.0	75.0	500.0	160.0	120.0	160.0	162.9	
EFFLUENT (MG/L)	6.0	4.0	7.0	10.0	5.0	ND	20.0	20.0	ND	15.0	2.0	8.0	9.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	19.14	13.52	24.50	56.20	22.50	ND	96.60	91.20	ND	53.25	6.46	25.20	39.29	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.7	5.8	6.3	4.3	4.0	5.6	4.7	5.4	5.9	4.4	5.6	4.2	5.2	
EFFLUENT (MG/L)	ND	0.3	0.6	0.4	0.5	0.5	1.2	0.6	0.7	0.8	0.6	0.6	0.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	1.01	2.10	2.24	2.25	2.74	5.79	2.73	2.54	2.84	1.93	1.89	2.43	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : EAR FALLS
 PLANT : EAR FALLS WPCP
 WORKS NUMBER : 110001006
 TREATMENT : EXTENDED AERATION
 : CONVERTIBLE OPERATING MODE
 :
 DESIGN CAPACITY : 2.86 (1000 M3)

REGION : NORTHWEST
 DISTRICT : KENORA
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : ENGLISH RIVER
 MINOR BASIN : LAKE WINNIPEG EAST
 MAJOR BASIN : NELSON RIVER
 POPULATION SERVED : 1,750

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.51	1.52	1.36	1.46	1.40	1.34	1.36	1.36	1.26	1.25	1.27	1.28	1.36	
BOD5														
INFLUENT (MG/L)	39.0	75.0	73.0	31.0	52.0	53.0	58.0	31.0	60.0	194.0	86.0	68.0	68.3	
EFFLUENT (MG/L)	2.4	2.4	2.5	3.4	2.5	2.2	1.2	0.8	1.8	1.8	1.5	1.8	2.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.62	3.64	3.40	4.96	3.50	2.94	1.63	1.08	2.26	2.25	1.90	2.30	2.72	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	355.0	73.0	118.0	110.0	65.0	130.0	30.0	510.0	263.0	293.0	205.0	65.0	184.8	
EFFLUENT (MG/L)	15.0	12.0	9.0	22.5	8.0	7.5	4.0	7.0	6.3	15.5	8.0	5.0	10.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	22.65	18.24	12.24	32.85	11.20	10.05	5.44	9.52	7.93	19.37	10.16	6.40	13.60	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.7	3.2	3.0	1.1	2.6	3.3	3.0	ND	3.7	6.2	4.5	2.9	3.3	
EFFLUENT (MG/L)	0.5	0.5	0.5	0.7		0.5	0.3	0.8	0.5	0.7	0.3	0.4	0.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.75	0.76	0.68	1.02		0.67	0.40	1.08	0.63	0.87	0.38	0.51	0.68	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : EMO
 PLANT : EMO LAGOON
 WORKS NUMBER : 110001015
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 DESIGN CAPACITY : 0.27 (1000 M3)

REGION : NORTHWEST
 DISTRICT : RAINY RIVER
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : RAINY RIVER
 MINOR BASIN : LAKE WINNIPEG EAST
 MAJOR BASIN : NELSON RIVER
 POPULATION SERVED : 750

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.41	0.38	0.44	0.72	0.53	0.65	0.53	0.60	0.41	0.41	0.44	0.35	0.49	
LAGOON DISCHARGE	ND	ND	ND	0.52	21.58	71.92	ND	ND	ND	ND	73.70	ND	41.93	
BOD5														
INFLUENT (MG/L)	156.0	46.0	63.0	118.0	29.0	86.0	55.0	89.0	131.0	134.0	163.0	172.0	103.5	
EFFLUENT (MG/L)	ND	ND	ND	20.0	14.1	22.5	ND	ND	ND	4.2	7.1	ND	13.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	14.40	7.47	14.62	ND	ND	ND	1.72	3.12	ND	6.66	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	177.0	130.0	80.0	138.0	163.0	90.0	73.0	190.0	140.0	130.0	260.0	155.0	143.8	
EFFLUENT (MG/L)	ND	ND	ND	25.0	18.7	58.3	ND	ND	ND	1.0	5.5	ND	21.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	18.00	9.91	37.89	ND	ND	ND	0.41	2.42	ND	10.63	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.7	5.1	3.9	6.3	1.6	4.7	4.1	5.7	5.9	7.4	6.3	6.2	5.4	
EFFLUENT (MG/L)	ND	ND	ND	1.9	1.8	1.2	ND	ND	ND	1.9	1.4	ND	1.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	1.36	0.95	0.78	ND	ND	ND	0.77	0.61	ND	0.78	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - ENVIRONMENTAL ASSESSMENT BEING CONDUCTED
 FACILITY EXPANSION/UPGRADING - PRELIMINARY DESIGN PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
------------	----------	---------------------------

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : FORT FRANCES
 PLANT : FORT FRANCES WPCP
 WORKS NUMBER : 110000258
 TREATMENT : PRIMARY
 :
 :
 DESIGN CAPACITY : 9.09 (1000 M3)

REGION : NORTHWEST
 DISTRICT : RAINY RIVER
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : RAINY RIVER
 MINOR BASIN : LAKE WINNIPEG EAST
 MAJOR BASIN : NELSON RIVER
 POPULATION SERVED : 8,750

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.51	5.86	6.34	9.58	7.99	9.95	9.00	8.10	7.05	6.63	6.28	5.87	7.35	
BOD5														
INFLUENT (MG/L)	66.0	60.0	79.0	42.0	40.0	63.0	50.0	54.0	72.0	65.0	86.0	98.0	64.6	
EFFLUENT (MG/L)	39.0	53.5	42.0	30.0	44.5	35.5	36.0	24.0	35.0	40.5	73.0	75.0	44.0	
LOADING (KG/D)	214.89	313.51	266.28	287.40	355.55	353.22	324.00	194.40	246.75	268.51	458.44	440.25	323.40	
PERCENT REMOVAL	41	11	47	29	ND	44	28	56	51	38	15	23	32	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	153.0	98.0	175.0	90.0	70.0	115.0	95.0	140.0	118.0	118.0	163.0	275.0	134.2	
EFFLUENT (MG/L)	53.7	75.0	65.0	42.5	52.5	57.5	37.5	28.3	40.0	70.0	30.0	75.0	52.3	
LOADING (KG/D)	295.88	439.50	412.10	407.15	419.47	572.12	337.50	229.23	282.00	464.10	188.40	440.25	384.41	
PERCENT REMOVAL	65	23	63	53	25	50	61	80	66	41	82	73	61	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.4	3.1	3.3	1.9	2.6	3.0	2.4	2.7	3.1	4.8	3.9	4.0	3.2	
EFFLUENT (MG/L)	1.8	2.6	1.7	1.0	2.0	2.1	1.6	1.7	2.0	2.6	0.8	2.4	1.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	9.91	15.23	10.77	9.58	15.98	20.89	14.40	13.77	14.10	17.23	5.02	14.08	13.97	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30%	YES
SS	50%	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - SEWAGE UPGRADE UNDERWAY
 COLLECTION SYSTEM - INFILTRATION PROBLEMS BEING CORRECTED
 COLLECTION SYSTEM - ILLEGAL CONNECTIONS BEING ELIMINATED
 COLLECTION SYSTEM - ENFORCING SEWER-USE BYLAWS
 FACILITY EXPANSION/UPGRADING - PRELIMINARY DESIGN PHASE

START DATE END DATE ANTICIPATED COMPLIANCE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GERALDTON
 PLANT : GERALDTON WPCP
 WORKS NUMBER : 110001649
 TREATMENT : EXTENDED AERATION
 :
 :
 DESIGN CAPACITY : 1.81 (1000 M3)

REGION : NORTHWEST
 DISTRICT : THUNDER BAY
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE KENOGAMISIS
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 2,901

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.63	1.66	1.53	2.71	3.10	1.98	1.66	1.33	1.18	1.31	1.55	1.28	1.74	
BOD5														
INFLUENT (MG/L)	96.0	76.0	84.0	57.0	42.0	61.0	88.0	75.0	108.0	84.0	106.0	120.0	83.1	
EFFLUENT (MG/L)	3.2	5.4	4.6	3.6	10.2	3.1	2.0	1.9	2.1	2.2	1.8	2.0	3.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.21	8.96	7.03	9.75	31.62	6.13	3.32	2.52	2.47	2.88	2.79	2.56	6.09	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	120.0	93.0	200.0	190.0	65.0	90.0	67.0	65.0	100.0	93.0	150.0	130.0	113.6	
EFFLUENT (MG/L)	7.0	8.0	5.0	5.5	11.0	6.0	2.7	3.0	4.5	2.0	3.0	3.0	5.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	11.41	13.28	7.65	14.90	34.10	11.88	4.48	3.99	5.31	2.62	4.65	3.84	8.87	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.4	4.3	4.1	3.3	2.4	3.9	7.2	4.7	5.3	5.2	4.4	4.5	4.5	
EFFLUENT (MG/L)	2.7	2.7	2.5	1.4	1.0	1.8	2.4	2.9	2.9	2.9	2.1	2.3	2.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	4.40	4.48	3.82	3.79	3.10	3.56	3.98	3.85	3.42	3.79	3.25	2.94	4.00	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GOLDEN
 PLANT : BALMERTOWN WPCP
 WORKS NUMBER : 110003291
 TREATMENT : EXTENDED AERATION
 :
 :
 :
 DESIGN CAPACITY : 1.22 (1000 M3)

REGION : NORTHWEST
 DISTRICT : KENORA
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BALMER CREEK
 MINOR BASIN : LAKE WINNIPEG EAST
 MAJOR BASIN : NELSON RIVER
 POPULATION SERVED : 1,300

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.09	1.16	1.17	1.42	1.21	1.24	1.09	1.03	0.78	0.70	0.81	1.07	1.06	
BOD5														
INFLUENT (MG/L)	107.0	96.0	52.0	110.0	63.0	91.0	89.0	88.0	70.0	89.0	121.0	117.0	91.1	
EFFLUENT (MG/L)	7.5	14.0	6.8	4.2	2.5	4.0	3.1	3.0	4.0	11.2	3.9	4.7	5.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8.17	16.24	7.95	5.96	3.02	4.96	3.37	3.09	3.12	7.84	3.15	5.02	6.04	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	76.0	103.0	48.0	103.0	83.0	103.0	92.0	75.0	53.0	83.0	85.0	83.0	82.3	
EFFLUENT (MG/L)	8.0	17.5	11.0	6.5	4.5	8.0	2.0	6.0	15.0	22.5	9.0	8.0	9.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8.72	20.30	12.87	9.23	5.44	9.92	2.18	6.18	11.70	15.75	7.29	8.56	10.39	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.2	4.4	5.0	3.3	3.9	4.7	3.8	4.9	4.4	5.1	4.8	4.6	4.4	
EFFLUENT (MG/L)	2.4	1.3	1.8	0.9	1.3	1.8	1.9	2.8	3.3	3.5	2.6	2.4	2.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.61	1.50	2.10	1.27	1.57	2.23	2.07	2.88	2.57	2.45	2.10	2.56	2.33	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GOLDEN
 PLANT : COCHENOUR LAGOON
 WORKS NUMBER : 110002504
 TREATMENT : CONVENTIONAL LAGOON SEASONAL
 :
 :
 :
 DESIGN CAPACITY : 0.76 (1000 M3)

REGION : NORTHWEST
 DISTRICT : KENORA
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : RED LAKE
 MINOR BASIN : LAKE WINNIPEG EAST
 MAJOR BASIN : NELSON RIVER
 POPULATION SERVED : 800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.51	0.45	0.48	0.42	0.36	0.33	0.30	0.31	0.34	0.38	0.53	0.45	0.41	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	53.90	ND	ND	ND	ND	53.90	ND	53.90	
BOD5														
INFLUENT (MG/L)	12.0	ND	ND	ND	37.0	154.0	154.0	94.0	88.0	107.0	61.0	50.0	84.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	1.5	ND	3.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	1.94	ND	ND	ND	ND	ND	0.79	ND	1.44	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	15.0	ND	ND	ND	55.0	308.0	143.0	75.0	78.0	110.0	68.0	70.0	102.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	5.0	ND	ND	ND	ND	ND	5.0	ND	5.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	1.80	ND	ND	ND	ND	ND	2.65	ND	2.05	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.6	ND	ND	ND	1.6	7.2	7.4	7.0	4.3	6.3	3.4	2.2	4.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1	ND	0.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05	ND	0.04	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : IGNACE
 PLANT : IGNACE WPCP
 WORKS NUMBER : 110001355
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 2.53 (1000 M3)

REGION : NORTHWEST
 DISTRICT : KENORA
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : AGIMAC CREEK
 MINOR BASIN : LAKE WINNIPEG EAST
 MAJOR BASIN : NELSON RIVER
 POPULATION SERVED : 2,285

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.39	1.47	1.65	1.78	2.30	1.84	1.89	1.47	1.33	1.38	1.26	1.34	1.59	
BOD5														
INFLUENT (MG/L)	75.0	82.0	108.0	46.0	57.0	65.0	126.0	79.0	80.0	162.0	81.0	59.0	85.0	
EFFLUENT (MG/L)	4.0	3.7	5.1	3.4	3.2	5.4	3.5	4.8	5.0	3.1	2.5	3.6	3.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.56	5.43	8.41	6.05	7.36	9.93	6.61	7.05	6.65	4.27	3.15	4.82	6.20	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	105.0	90.0	225.0	75.0	80.0	45.0	40.0	53.0	80.0	272.0	125.0	50.0	103.3	
EFFLUENT (MG/L)	12.7	15.0	12.5	12.5	13.3	9.5	10.0	10.0	9.5	20.0	10.0	12.5	12.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	17.65	22.05	20.62	22.25	30.59	17.48	18.90	14.70	12.63	27.60	12.60	16.75	19.56	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.0	4.1	6.7	3.1	3.2	2.9	3.1	5.0	4.1	6.8	5.0	4.2	4.4	
EFFLUENT (MG/L)	0.6	0.7	0.7	0.6	0.6	0.4	0.6	0.6	0.5	0.8	0.7	0.9	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
LOADING (KG/D)	0.83	1.02	1.15	1.06	1.38	0.73	1.13	0.88	0.66	1.10	0.88	1.20	0.95	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED MONTHLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KENORA
 PLANT : KENORA WPCP
 WORKS NUMBER : 120000239
 TREATMENT : EXT AERATION/CONT STABILIZATION
 :
 :
 DESIGN CAPACITY : 18.18 (1000 M3)

REGION : NORTHWEST
 DISTRICT : KENORA
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : WINNIPEG RIVER
 MINOR BASIN : LAKE WINNIPEG EAST
 MAJOR BASIN : NELSON RIVER
 POPULATION SERVED : 12,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	8.15	8.46	8.81	12.68	12.33	16.87	13.34	12.72	10.28	9.33	9.19	9.08	10.94	
BOD5														
INFLUENT (MG/L)	88.0	110.0	72.0	88.0	105.0	90.0	100.0	115.0	102.0	105.0	86.0	76.0	94.8	
EFFLUENT (MG/L)	17.0	23.0	14.0	28.0	6.3	8.0	12.0	8.0	24.0	7.4	32.0	12.0	16.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	138.55	194.58	123.34	355.04	77.67	134.96	160.08	101.76	246.72	69.04	294.08	108.96	175.04	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	110.0	120.0	100.0	85.0	540.0	95.0	300.0	220.0	80.0	130.0	95.0	120.0	166.3	
EFFLUENT (MG/L)	10.0	9.0	8.0	15.0	15.0	35.0	9.0	5.0	10.0	4.0	35.0	6.0	13.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	81.50	76.14	70.48	190.20	184.95	590.45	120.06	63.60	102.80	37.32	321.65	54.48	146.60	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.2	5.4	3.2	4.7	5.0	4.3	4.4	4.4	4.0	5.7	3.8	3.9	4.5	
EFFLUENT (MG/L)	2.6	2.1	2.0	2.7	0.6	0.6	0.8	0.6	0.4	0.4	1.1	0.3	1.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	21.19	17.76	17.62	34.23	7.39	10.12	10.67	7.63	4.11	3.73	10.10	2.72	13.13	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LONGLAC
 PLANT : LONGLAC WPCP
 WORKS NUMBER : 110001042
 TREATMENT : CONTACT STABILIZATION
 :
 :
 :
 DESIGN CAPACITY : 2.45 (1000 M3)

REGION : NORTHWEST
 DISTRICT : THUNDER BAY
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : MAKING GROUND RIVER
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 2,900

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.79	1.98	1.89	3.48	3.01	2.21	2.06	1.91	1.73	1.83	1.97	1.32	2.10	
BOD5														
INFLUENT (MG/L)	82.0	91.0	81.0	86.0	63.0	58.0	96.0	68.0	89.0	64.0	99.0	106.0	81.9	
EFFLUENT (MG/L)	5.3	13.5	6.8	9.7	7.8	5.6	5.3	4.8	5.7	4.7	4.2	10.5	7.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.48	26.73	12.85	33.75	23.47	12.37	10.91	9.16	9.86	8.60	8.27	13.86	14.70	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	95.0	103.0	107.0	238.0	75.0	105.0	65.0	93.0	63.0	90.0	140.0	455.0	135.8	
EFFLUENT (MG/L)	7.0	7.5	20.0	15.0	12.5	8.0	4.0	11.5	5.0	3.0	4.5	6.0	8.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	12.53	14.85	37.80	52.20	37.62	17.68	8.24	21.96	8.65	5.49	8.86	7.92	18.27	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.1	5.6	5.2	3.9	3.6	4.2	6.2	4.3	5.1	4.1	4.3	5.1	4.7	
EFFLUENT (MG/L)	1.2	1.1	1.8	0.6	0.5	0.5	0.3	0.6	0.4	0.4	0.4	0.4	0.7	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.14	2.17	3.40	2.08	1.50	1.10	0.61	1.14	0.69	0.73	0.78	0.52	1.47	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MADSEN
 PLANT : MADSEN WPCP
 WORKS NUMBER : 110002363
 TREATMENT : COMMUNAL SEPTIC TANK
 :
 :
 DESIGN CAPACITY : 0.27 (1000 M3)

REGION : NORTHWEST
 DISTRICT : KENORA
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : NO DISCHARGE TO S.WATER
 MINOR BASIN : LAKE WINNIPEG EAST
 MAJOR BASIN : NELSON RIVER
 POPULATION SERVED : 300

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.08	0.11	0.08	0.09	0.10	0.10	0.11	0.09	0.09	0.09	0.10	0.12	0.10	
BOD5														
INFLUENT (MG/L)	72.0	134.0	86.0	61.0	47.0	284.0	108.0	155.0	117.0	104.0	143.0	106.0	118.1	
EFFLUENT (MG/L)	86.0	64.8	58.0	45.0	39.0	64.8	85.0	84.0	73.3	60.5	70.5	57.0	65.7	
LOADING (KG/D)	6.88	7.12	4.64	4.05	3.90	6.48	9.35	7.56	6.59	5.44	7.05	6.84	6.57	
PERCENT REMOVAL	ND	52	33	26	17	77	21	46	37	42	51	46	44	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	45.0	135.0	91.0	73.0	40.0	75.0	80.0	40.0	80.0	103.0	113.0	122.0	83.1	
EFFLUENT (MG/L)	50.0	36.0	40.0	40.0	41.3	41.3	28.0	35.0	30.0	40.0	37.5	38.3	38.1	
LOADING (KG/D)	4.00	3.96	3.20	3.60	4.13	4.13	3.08	3.15	2.70	3.60	3.75	4.59	3.81	
PERCENT REMOVAL	ND	73	56	45	ND	45	65	13	63	61	67	69	54	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.4	5.7	7.0	4.3	8.6	6.2	9.7	4.8	5.1	4.6	7.0	5.7	6.1	
EFFLUENT (MG/L)	4.7	4.2	4.4	3.6	3.7	4.7	4.5	4.9	4.4	4.2	3.7	4.2	4.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.37	0.46	0.35	0.32	0.37	0.47	0.49	0.44	0.39	0.37	0.37	0.50	0.43	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30%	NO DIRECT DISCHARGE
SS	50%	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MANITOUWADGE
 PLANT : MANITOUWADGE LAGOON
 WORKS NUMBER : 120001988
 TREATMENT : AERATED LAGOON
 : CONTINUOUS DISCHARGE
 :
 DESIGN CAPACITY : 4.10 (1000 M3)

REGION : NORTHWEST
 DISTRICT : THUNDER BAY
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : RUDDER LAKE
 MINOR BASIN : SUPERIOR
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 5,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.92	2.79	2.58	3.53	5.16	3.28	3.00	2.85	2.67	2.57	2.83	2.79	3.08	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	102.0	113.0	106.0	46.0	52.0	52.0	44.0	98.0	94.0	78.0	205.0	76.0	88.8	
EFFLUENT (MG/L)	18.0	22.0	17.0	13.0	16.0	16.0	6.5	7.0	3.7	7.4	16.0	10.0	12.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	52.56	61.38	43.86	45.89	82.56	52.48	19.50	19.95	9.87	19.01	45.28	27.90	39.12	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	85.0	110.0	100.0	90.0	60.0	95.0	8.0	60.0	60.0	110.0	140.0	85.0	83.6	
EFFLUENT (MG/L)	15.0	20.0	10.0	25.0	10.0	55.0	15.0	10.0	7.0	15.0	15.0	10.0	17.3	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	43.80	55.80	25.80	88.25	51.60	180.40	45.00	28.50	18.69	38.55	42.45	27.90	53.28	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.1	6.3	5.0	4.2	1.9	3.5	3.0	4.2	4.4	4.0	2.9	3.3	3.9	
EFFLUENT (MG/L)	3.1	3.1	4.1	3.6	2.7	2.2	3.5	3.2	2.8	3.4	3.5	3.3	3.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	9.05	8.64	10.57	12.70	13.93	7.21	10.50	9.12	7.47	8.73	9.90	9.20	9.86	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MARATHON
 PLANT : MARATHON WPCP
 WORKS NUMBER : 120000471
 TREATMENT : EXTENDED AERATION
 :
 :
 DESIGN CAPACITY : 4.40 (1000 M3)

REGION : NORTHWEST
 DISTRICT : THUNDER BAY
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : LAKE SUPERIOR
 MINOR BASIN : SUPERIOR
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 5,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.14	2.39	2.95	2.68	2.09	1.50	1.47	1.41	1.57	1.69	1.64	1.60	1.93	
BOD5														
INFLUENT (MG/L)	141.0	96.0	88.0	71.0	112.0	123.0	128.0	140.0	121.0	121.0	154.0	175.0	122.5	
EFFLUENT (MG/L)	3.0	3.6	3.2	2.2	3.4	1.7	2.6	2.9	3.6	3.6	3.7	2.3	3.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.42	8.60	9.44	5.89	7.10	2.55	3.82	4.08	5.65	6.08	6.06	3.68	5.79	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	245.0	100.0	98.0	170.0	123.0	100.0	90.0	108.0	95.0	125.0	150.0	120.0	127.0	
EFFLUENT (MG/L)	5.0	5.0	4.0	4.0	5.0	3.5	2.7	1.6	2.0	6.0	3.0	2.0	3.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.70	11.95	11.80	10.72	10.45	5.25	3.96	2.25	3.14	10.14	4.92	3.20	7.14	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.5	5.9	4.7	4.6	5.1	6.1	8.2	8.4	6.6	7.8	7.1	7.2	6.5	
EFFLUENT (MG/L)	4.4	4.4	3.8	2.9	4.0	5.2	6.2	5.3	5.0	4.5	4.3	5.0	4.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	9.41	10.51	11.21	7.77	8.36	7.80	9.11	7.47	7.85	7.60	7.05	8.00	8.88	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NAKINA
 PLANT : NAKINA WPCP (NO PH REMOVAL AUG.18 1987)
 WORKS NUMBER : 110003308
 TREATMENT : EXTENDED AERATION
 : CONVERTIBLE OPERATING MODE
 :
 DESIGN CAPACITY : 1.70 (1000 M3)

REGION : NORTHWEST
 DISTRICT : THUNDER BAY
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BALKAM CREEK
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 750

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.43	0.42	0.38	0.48	0.83	0.58	0.37	0.31	0.34	0.38	0.45	0.41	0.45	
BOD5														
INFLUENT (MG/L)	88.0	117.0	395.0	105.0	61.0	70.0	77.0	151.0	138.0	72.0	112.0	104.0	124.2	
EFFLUENT (MG/L)	1.5	1.9	2.1	1.9	2.1	1.6	1.1	1.3	1.4	1.0	2.4	3.2	1.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.64	0.79	0.79	0.91	1.74	0.92	0.40	0.40	0.47	0.38	1.08	1.31	0.81	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	105.0	125.0	500.0	240.0	98.0	53.0	60.0	163.0	128.0	75.0	105.0	105.0	146.4	
EFFLUENT (MG/L)	5.5	5.4	8.0	5.0	5.0	3.5	2.7	3.7	3.0	4.5	9.0	12.0	5.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.36	2.26	3.04	2.40	4.15	2.03	0.99	1.14	1.02	1.71	4.05	4.92	2.52	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.2	5.4	34.0	4.6	2.6	3.2	4.3	6.7	5.1	4.0	3.5	5.1	6.9	
EFFLUENT (MG/L)	2.1	2.4	2.7	2.0	1.4	1.9	1.7	0.3	0.7	1.1	1.7	2.0	1.7	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.90	1.00	1.02	0.96	1.16	1.10	0.62	0.09	0.23	0.41	0.76	0.82	0.77	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NIPIGON
 PLANT : NIPIGON WPCP
 WORKS NUMBER : 120000514
 TREATMENT : PRIMARY
 :
 :
 :
 DESIGN CAPACITY : 1.63 (1000 M3)

REGION : NORTHWEST
 DISTRICT : THUNDER BAY
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : NIPIGON RIVER
 MINOR BASIN : SUPERIOR
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,180

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.78	1.77	1.73	1.78	1.92	1.80	1.65	1.65	1.67	1.59	1.67	1.75	1.73	
BOD5														
INFLUENT (MG/L)	96.0	96.0	112.0	64.0	122.0	115.0	ND	94.0	94.0	98.0	98.0	152.0	103.7	
EFFLUENT (MG/L)	50.0	50.0	41.0	35.0	74.0	76.0	82.0	72.0	34.0	55.0	52.0	145.0	63.8	
LOADING (KG/D)	89.00	88.50	70.93	62.30	142.08	136.80	135.30	118.80	56.78	87.45	86.84	253.75	110.37	
PERCENT REMOVAL	48	48	63	45	39	34		23	64	44	47	05	38	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	90.0	90.0	140.0	120.0	160.0	100.0	ND	ND	110.0	160.0	140.0	130.0	124.0	
EFFLUENT (MG/L)	45.0	45.0	45.0	45.0	35.0	160.0	30.0	25.0	10.0	40.0	40.0	60.0	48.3	
LOADING (KG/D)	80.10	79.65	77.85	80.10	67.20	288.00	49.50	41.25	16.70	63.60	66.80	105.00	83.56	
PERCENT REMOVAL	50	50	68	63	78	ND			91	75	71	54	61	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.8	5.8	4.8	5.0	6.8	4.7	ND	6.2	6.8	5.4	6.8	4.8	5.7	
EFFLUENT (MG/L)	3.9	3.9	3.0	3.0	4.2	3.8	3.6	3.9	3.1	4.8	4.0	4.6	3.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	6.94	6.90	5.19	5.34	8.06	6.84	5.94	6.43	5.17	7.63	6.68	8.05	6.57	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30%	YES
SS	50%	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PICKLE LAKE
 PLANT : PICKLE LAKE WPCP
 WORKS NUMBER : 110002185
 TREATMENT : EXTENDED AERATION
 :
 :
 DESIGN CAPACITY : 0.90 (1000 M3)

REGION : NORTHWEST
 DISTRICT : KENORA
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : KAWINOGANS RIVER
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED
 POPULATION SERVED : 425

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.29	0.34	0.36	0.40	0.48	0.52	0.60	0.54	0.47	0.39	0.37	0.40	0.43	
BOD5														
INFLUENT (MG/L)	68.0	130.0	119.0	92.0	30.0	15.0	17.0	52.0	42.0	52.0	135.0	38.0	65.8	
EFFLUENT (MG/L)	3.3	2.7	4.8	4.1	2.5	2.2	1.6	1.8	1.5	1.6	1.8	2.1	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.95	0.91	1.72	1.64	1.20	1.14	0.96	0.97	0.70	0.62	0.66	0.84	1.08	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	68.0	260.0	120.0	180.0	42.0	20.0	25.0	55.0	30.0	53.0	253.0	50.0	96.3	
EFFLUENT (MG/L)	8.0	7.0	11.5	4.5	15.0	4.5	1.5	3.0	3.5	3.7	4.5	23.5	7.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.32	2.38	4.14	1.80	7.20	2.34	0.90	1.62	1.64	1.44	1.66	9.40	3.23	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.1	3.4	1.7	2.6	1.3	1.4	1.0	2.4	1.8	2.6	7.1	1.7	2.5	
EFFLUENT (MG/L)	1.5	1.5	1.9	0.7	0.5	0.6	0.4	1.2	1.0	2.0	1.2	0.6	1.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.43	0.51	0.68	0.28	0.24	0.31	0.24	0.64	0.47	0.78	0.44	0.24	0.47	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RED LAKE
 PLANT : RED LAKE WPCP
 WORKS NUMBER : 110001131
 TREATMENT : EXTENDED AERATION
 :
 :
 DESIGN CAPACITY : 2.46 (1000 M3)

REGION : NORTHWEST
 DISTRICT : KENORA
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : HOWEY BAY
 MINOR BASIN : LAKE WINNIPEG EAST
 MAJOR BASIN : NELSON RIVER
 POPULATION SERVED : 1,945

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.93	1.93	1.89	2.25	2.25	2.18	1.96	1.85	1.67	1.71	1.88	1.98	1.96	
BOD5														
INFLUENT (MG/L)	100.0	40.0	73.0	34.0	56.0	60.0	82.0	38.0	60.0	75.0	93.0	100.0	67.6	
EFFLUENT (MG/L)	2.9	3.2	4.6	3.8	3.1	3.9	2.6	1.6	3.1	1.8	3.5	3.6	3.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.59	6.17	8.69	8.55	6.97	8.50	5.09	2.96	5.17	3.07	6.58	7.12	6.08	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	88.0	63.0	78.0	48.0	73.0	48.0	83.0	40.0	67.0	88.0	93.0	73.0	70.2	
EFFLUENT (MG/L)	5.0	4.5	8.0	9.0	7.5	15.0	3.0	4.5	5.3	5.0	7.0	8.5	6.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.65	8.68	15.12	20.25	16.87	32.70	5.88	8.32	8.85	8.55	13.16	16.83	13.52	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.3	2.8	3.1	2.1	2.6	3.1	3.6	3.0	3.0	4.1	3.8	2.9	3.1	
EFFLUENT (MG/L)	1.5	1.3	1.4	1.0	1.1	1.8	1.7	1.5	1.8	2.1	1.5	1.4	1.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.89	2.50	2.64	2.25	2.47	3.92	3.33	2.77	3.00	3.59	2.82	2.77	2.94	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RED ROCK
 PLANT : RED ROCK WPCP
 WORKS NUMBER : 120001817
 TREATMENT : PRIMARY
 :
 :
 DESIGN CAPACITY : 1.27 (1000 M3)

REGION : NORTHWEST
 DISTRICT : THUNDER BAY
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : NIPIGON BAY
 MINOR BASIN : SUPERIOR
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,150

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.72	0.71	0.73	1.19	1.11	1.07	0.94	0.96	0.75	0.72	0.67	0.64	0.85	
BOD5														
INFLUENT (MG/L)	84.0	120.0	106.0	44.0	78.0	70.0	64.0	74.0	60.0	72.0	135.0	118.0	85.4	
EFFLUENT (MG/L)	38.0	28.0	39.0	29.0	34.0	21.0	41.0	9.0	22.0	37.0	85.0	50.0	36.1	
LOADING (KG/D)	27.36	19.88	28.47	34.51	37.74	22.47	38.54	8.64	16.50	26.64	56.95	32.00	30.69	
PERCENT REMOVAL	55	77	63	34	56	70	36	88	63	49	37	58	58	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	75.0	130.0	160.0	70.0	110.0	120.0	25.0	55.0	60.0	95.0	85.0	130.0	92.9	
EFFLUENT (MG/L)	15.0	20.0	30.0	25.0	30.0	35.0	6.0	8.0	20.0	15.0	35.0	30.0	22.4	
LOADING (KG/D)	10.80	14.20	21.90	29.75	33.30	37.45	5.64	7.68	15.00	10.80	23.45	19.20	19.04	
PERCENT REMOVAL	80	85	81	64	73	71	76	85	67	84	59	77	76	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.4	5.9	6.3	1.5	3.8	3.5	2.2	2.9	4.6	3.5	3.6	5.2	4.0	
EFFLUENT (MG/L)	2.3	2.3	2.6	0.9	1.6	1.4	1.7	0.9	1.5	2.0	21.0	3.3	3.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	1.65	1.63	1.89	1.07	1.77	1.49	1.59	0.86	1.12	1.44	14.07	2.11	2.98	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	30%	YES
SS	50%	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SCHREIBER
 PLANT : SCHREIBER WPCP
 WORKS NUMBER : 110002112
 TREATMENT : EXTENDED AERATION
 : CONTACT STABILIZATION
 : CONVERTIBLE OPERATING MODE
 DESIGN CAPACITY : 1.13 (1000 M3)

REGION : NORTHWEST
 DISTRICT : THUNDER BAY
 OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : CREEK TO L.SUPERIOR
 MINOR BASIN : SUPERIOR
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 1,937

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.63	0.64	0.64	0.72	0.83	0.73	0.77	0.79	0.78	0.78	0.82	0.84	0.75	
BOD5														
INFLUENT (MG/L)	108.0	115.0	117.0	115.0	110.0	97.0	113.0	83.0	170.0	106.0	130.0	120.0	115.3	
EFFLUENT (MG/L)	41.0	33.0	38.7	13.0	24.1	23.0	ND	6.1	7.5	4.8	11.9	11.5	19.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	25.83	21.12	24.76	9.36	20.00	16.79	ND	4.81	5.85	3.74	9.75	9.66	14.63	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	170.0	110.0	133.0	113.0	101.0	88.0	55.0	68.0	215.0	125.0	195.0	83.0	121.3	
EFFLUENT (MG/L)	37.5	30.0	17.1	5.8	16.4	26.7	22.5	13.4	15.7	8.0	27.5	15.0	19.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	23.62	19.20	10.94	4.17	13.61	19.49	17.32	10.58	12.24	6.24	22.55	12.60	14.70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.6	5.4	7.1	5.6	4.2	5.5	5.1	ND	6.0	5.6	4.0	4.2	5.5	
EFFLUENT (MG/L)	3.7	3.3	4.1	3.0	3.0	3.2	2.8	3.5	2.9	3.5	2.6	2.5	3.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.33	2.11	2.62	2.16	2.49	2.33	2.15	2.76	2.26	2.73	2.13	2.10	2.40	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SIOUX LOOKOUT
 PLANT : SIOUX LOOKOUT WPCP
 WORKS NUMBER : 120000220
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 :
 :
 :
 DESIGN CAPACITY : 2.27 (1000 M3)

REGION : NORTHWEST
 DISTRICT : KENORA
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : PELICAN LAKE
 MINOR BASIN : LAKE WINNIPEG EAST
 MAJOR BASIN : NELSON RIVER
 POPULATION SERVED : 3,006

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.32	1.71	1.84	1.92	1.86	1.79	1.58	1.58	1.72	1.68	1.75	1.64	1.78	
BOD5														
INFLUENT (MG/L)	124.0	100.0	290.0	106.0	130.0	235.0	153.0	ND	9.0	285.0	155.0	154.0	158.3	
EFFLUENT (MG/L)	21.0	20.0	17.0	9.2	0.8	5.0	33.0	ND	14.0	130.0	9.0	9.0	24.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	48.72	34.20	31.28	17.66	1.48	8.95	52.14	ND	24.08	218.40	15.75	14.76	43.43	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	60.0	50.0	590.0	100.0	480.0	350.0	55.0	ND	4.0	290.0	440.0	120.0	230.8	
EFFLUENT (MG/L)	15.0	20.0	9.0	9.0	4.0	9.0	6.0	5.0	6.0	270.0	10.0	8.0	30.9*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	34.80	34.20	16.56	17.28	7.44	16.11	9.48	7.90	10.32	453.60	17.50	13.12	55.00	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.6	5.6	4.1	5.3	3.8	5.4	5.5	ND	2.9	5.4	4.7	4.2	4.7	
EFFLUENT (MG/L)	3.5	3.3	2.8	2.5		1.3	3.7	2.8	3.1	3.8	3.3	3.6	2.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	8.12	5.64	5.15	4.80		2.32	5.84	4.42	5.33	6.38	5.77	5.90	4.98	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	NA	NA

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW
 SLUDGE DISPOSAL/REMOVAL - UPGRADING LANDFILL SITE
 FACILITY EXPANSION/UPGRADING - ENVIRONMENTAL ASSESSMENT BEING CONDUCTED
 FACILITY EXPANSION/UPGRADING - PRELIMINARY DESIGN PHASE

START DATE	END DATE	ANTICIPATED COMPLIANCE
------------	----------	---------------------------

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TERRACE BAY
 PLANT : TERRACE BAY LAGOON
 WORKS NUMBER : 120000499
 TREATMENT : EXFILTRATION LAGOON
 : NO DISCHARGE
 :
 DESIGN CAPACITY : 1.36 (1000 M3)

REGION : NORTHWEST
 DISTRICT : THUNDER BAY
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : NO DISC.TO SURFACE WATER
 MINOR BASIN : SUPERIOR
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 2,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:

BOD - HAS NO CRITERIA
 SS - HAS NO CRITERIA
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TERRACE BAY
 PLANT : TERRACE BAY WPCP
 WORKS NUMBER : 120003030
 TREATMENT : EXTENDED AERATION
 : EXFILTRATION LAGOON
 :
 DESIGN CAPACITY : 0.54 (1000 M3)

REGION : NORTHWEST
 DISTRICT : THUNDER BAY
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : NO DISC.TO SURFACE WATER
 MINOR BASIN : SUPERIOR
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.24	0.27	0.23	0.29	0.20	0.30	0.29	0.30	0.26	0.27	0.23	0.20	0.26	
BOD5														
INFLUENT (MG/L)	190.0	115.0	195.0	140.0	82.0	86.0	130.0	62.0	150.0	145.0	ND	108.0	127.5	
EFFLUENT (MG/L)	4.7	7.6	7.6	14.0	4.8	3.0	1.8	3.1	6.8	38.0	ND	5.0	8.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	1.12	2.05	1.74	4.06	0.96	0.90	0.52	0.93	1.76	10.26	ND	1.00	2.29	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	310.0	140.0	280.0	230.0	140.0	90.0	100.0	100.0	180.0	140.0	ND	140.0	168.2	
EFFLUENT (MG/L)	4.0	15.0	10.0	20.0	5.0	9.0	4.0	4.0	40.0	19.0	ND	7.0	12.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.96	4.05	2.30	5.80	1.00	2.70	1.16	1.20	10.40	5.13	ND	1.40	3.25	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	11.0	7.0	14.0	7.5	4.8	5.5	5.6	5.0	4.7	5.7	ND	6.9	7.1	
EFFLUENT (MG/L)	3.5	3.9	3.3	3.5	ND	3.0	4.2	3.6	4.4	6.9	ND	3.7	4.0	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.84	1.05	0.75	1.01	ND	0.90	1.21	1.08	1.14	1.86	ND	0.74	1.04	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:

BOD - HAS NO CRITERIA
 SS - HAS NO CRITERIA
 TP - HAS NO CRITERIA
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : THUNDER BAY
 PLANT : THUNDER BAY WPCP
 WORKS NUMBER : 120004805
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :
 DESIGN CAPACITY : 109.10 (1000 M3)

REGION : NORTHWEST
 DISTRICT : THUNDER BAY
 OPERATING AUTHORITY : MUNICIPAL
 WATERCOURSE : KAMINISTIKWIA RIVER
 MINOR BASIN : SUPERIOR
 MAJOR BASIN : GREAT LAKES
 POPULATION SERVED : 101,527

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	78.88	64.00	63.30	90.58	93.54	92.62	79.64	83.58	85.17	72.82	69.59	63.89	78.13	
BOD5														
INFLUENT (MG/L)	166.0	169.0	172.0	144.0	107.0	136.0	177.0	168.0	161.0	173.0	146.0	176.0	157.9	
EFFLUENT (MG/L)	65.5	76.2	103.5	41.0	50.0	60.8	53.0	61.4	69.2	69.8	64.8	86.8	66.8	
LOADING (KG/D)	5166.64	4876.80	6551.55	3713.78	4677.00	5631.29	4220.92	5131.81	5893.76	5082.83	4509.43	5545.65	5219.08	
PERCENT REMOVAL	61	55	40	72	53	55	70	63	57	60	56	51	58	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	190.0	154.0	186.0	200.0	192.0	194.0	289.0	258.0	174.0	295.0	210.0	253.0	216.3	
EFFLUENT (MG/L)	83.7	77.3	97.5	79.0	70.0	63.6	62.5	54.9	51.3	65.3	68.7	76.3	70.8	
LOADING (KG/D)	6602.25	4947.20	6171.75	7155.82	6547.80	5890.63	4977.50	4588.54	4369.22	4755.14	4780.83	4874.80	5531.60	
PERCENT REMOVAL	56	50	48	61	64	67	78	79	71	78	67	70	67*	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.3	4.4	4.6	4.2	3.9	3.8	5.0	4.1	4.4	5.9	5.0	5.1	4.6	
EFFLUENT (MG/L)	1.4*	1.6*	2.8*	0.8	0.7	1.2*	0.9	0.8	1.2*	1.9*	1.6*	1.7*	1.4	8
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	110.43	102.40	177.24	72.46	65.47	111.14	71.67	66.86	102.20	138.35	111.34	108.61	109.38	

SUMMARY

PARAM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	NO
TP	1.0 MG/L	NO

NOTE:

BOD - ASSESSED ANNUALLY
 SS - ASSESSED ANNUALLY
 TP - ASSESSED ANNUALLY
 * - EXCEEDS EFFLUENT CRITERIA
 SPACE (EG. " ") INDICATES A VALUE OF ZERO
 ND - NO DATA
 NA - NOT APPLICABLE

REMEDIAL MEASURES

OPERATIONAL/PROCESS - SAMPLING PROGRAM BEING MODIFIED
 EQUIPMENT/MAINTENANCE - NEW EQUIPMENT BEING INSTALLED
 FACILITY EXPANSION/UPGRADING - UPGRADING TO SECONDARY TREATMENT
 FACILITY EXPANSION/UPGRADING - APPLICATION FOR FUNDING

START DATE	END DATE	ANTICIPATED COMPLIANCE
1990/03	1990/04	
1990/03	1990/04	
1990/03	1995/03	

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APPENDIX D

SEWAGE TREATMENT PLANT
PRIMARY AND SECONDARY BYPASS DATA
FOR 1989

ABBREVIATIONS FOR APPENDIX D

Hrs. Hours

No of Times Number of Bypass Occurrences

1000 m³ Thousands of Cubic Meters

WPCP Water Pollution Control Plant
(same as STP)

SOUTHWEST REGION

1989 BYPASS OCCURRENCES

MUNICIPALITY : GODERICH
 PLANT : GODERICH WPCP
 WORKS NUMBER : 120000943
 WATERCOURSE : LAKE HURON

REGION : SOUTHWEST
 DISTRICT : HURON
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 9.092
 POPULATION SERVED : 7,400
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN		1.0			1.0	
FEB						
MAR		1.0			1.0	
APR						
MAY		2.8			2.8	
JUN		1.0			1.0	
JUL						
AUG		9.0			9.0	
SEP		1.9			1.9	
OCT		2.0			2.0	
NOV		1.0			1.0	
DEC						
TOTAL	0.00	19.7	0	0.00	19.7	0
OBSERVATIONS	0	8.0	0	0	8.0	0
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : LEAMINGTON
 PLANT : LEAMINGTON WPCP
 WORKS NUMBER : 120001069
 WATERCOURSE : LAKE ERIE

REGION : SOUTHWEST
 DISTRICT : ESSEX
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 19.093
 POPULATION SERVED : 12,600
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC	1.00	6.0	6	0.00	0.0	0
TOTAL OBSERVATIONS	1.00 1	6.0 1.0	6 1	0.00 1	0.0 1.0	0 1
PERCENTAGE OF PLANT EFFLUENT	0.01%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : LONDON
 PLANT : GREENWAY WPCP
 WORKS NUMBER : 120000863
 WATERCOURSE : THAMES RIVER

REGION : SOUTHWEST
 DISTRICT : MIDDLESEC
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 124.333
 POPULATION SERVED : 168,274
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN				9.27	23.0	9
FEB						
MAR				53.50	14.6	4
APR				39.77	46.1	12
MAY				15.54	17.1	8
JUN				25.20	15.4	9
JUL				2.38	8.0	3
AUG	10.57	58.5	5			
SEP				10.33	4.6	9
OCT				5.68	16.8	2
NOV				57.05	56.9	10
DEC				21.35	10.8	1
TOTAL	10.57	58.5	5	240.10	213.3	67
OBSERVATIONS	1	1.0	1	10	10.0	10
PERCENTAGE OF PLANT EFFLUENT	0.02%			0.54%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : LONDON
 PLANT : POTTERSBURG WPCP
 WORKS NUMBER : 120000836
 WATERCOURSE : THAMES RIVER

REGION : SOUTHWEST
 DISTRICT : MIDDLESEC
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 22.048
 POPULATION SERVED : 25,653
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	1.66	11.0	2			
FEB						
MAR	4.85	9.0	2			
APR	1.02	19.0	6			
MAY	1.35	1.5	1			
JUN	0.65	1.0	1			
JUL						
AUG						
SEP	0.04	0.3	2			
OCT						
NOV	1.29	4.0	4			
DEC	0.45	5.0	1			
TOTAL	11.32	50.8	19	0.00	0.0	0
OBSERVATIONS	8	8.0	8	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.19%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : LONDON
 PLANT : VAUXHALL WPCP
 WORKS NUMBER : 120000845
 WATERCOURSE : THAMES RIVER

REGION : SOUTHWEST
 DISTRICT : MIDDLESEC
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 20.912
 POPULATION SERVED : 22,981
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC	0.00		4	0.00		0
TOTAL OBSERVATIONS	0.00 1	0.0 0.0	4 1	0.00 1	0.0 0.0	0 1
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : MAIDSTONE	REGION : SOUTHWEST
PLANT : BELLE RIVER-MAIDSTONE WPCP	DISTRICT : ESSEX
WORKS NUMBER : 110002078	OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE ST.CLAIR	MINOR BASIN : ERIE
	MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 6.819
 POPULATION SERVED : 8,568
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	6.81	10.0	1	0.00	0.0	0
JUL	75.65	80.5	5	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	82.47 11	90.5 11.0	6 11	0.00 11	0.0 11.0	0 11
PERCENTAGE OF PLANT EFFLUENT	4.46%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : OWEN SOUND
 PLANT : OWEN SOUND WPCP
 WORKS NUMBER : 110000551
 WATERCOURSE : GEORGIAN BAY

REGION : SOUTHWEST
 DISTRICT : GREY
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 24.548
 POPULATION SERVED : 20,000
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	3.68	9.0	1	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.69	2.0	1	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	4.37 12	11.0 12.0	2 12	0.00 12	0.0 12.0	0 12
PERCENTAGE OF PLANT EFFLUENT	0.09%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : PORT BURWELL
 PLANT : PORT BURWELL WPCP
 WORKS NUMBER : 110001319
 WATERCOURSE : BIG OTTER CR.- LAKE ERIE

REGION : SOUTHWEST
 DISTRICT : ELGIN
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 0.527
 POPULATION SERVED : 780
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	1	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	0.00 12	0.0 12.0	1 12	0.00 12	0.0 12.0	0 12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : PORT ELGIN
 PLANT : PORT ELGIN WPCP
 WORKS NUMBER : 120001470
 WATERCOURSE : SAUGEEEN RIVER

REGION : SOUTHWEST
 DISTRICT : BRUCE
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 6.455
 POPULATION SERVED : 6,115
 TREATMENT : OXIDATION DITCH
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	113.14	3.3	1	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0			
OCT	0.00		0			
NOV	0.00	0.3	1	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	113.14 12	3.6 11.0	2 12	0.00 10	0.0 10.0	0 10
PERCENTAGE OF PLANT EFFLUENT	0.01%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : STEPHEN
 PLANT : HURON PARK WPCP
 WORKS NUMBER : 110003488
 WATERCOURSE : AUSABLE RIVER

REGION : SOUTHWEST
 DISTRICT : HURON
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.818
 POPULATION SERVED : 1,400
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.54	20.0	3	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.39	15.0	5	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	0.93 12	35.0 12.0	8 12	0.00 12	0.0 12.0	0 12
PERCENTAGE OF PLANT EFFLUENT	0.23%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : STRATFORD
 PLANT : STRATFORD WPCP
 WORKS NUMBER : 110000702
 WATERCOURSE : AVON RIVER

REGION : SOUTHWEST
 DISTRICT : PERTH
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 27.276
 POPULATION SERVED : 26,078
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.82	4.2	2	7.01	16.1	3
FEB	0.00	0.0	0	0.00	0.0	0
MAR	2.84	5.0	1	31.21	51.9	4
APR	0.00	0.0	0	3.93	28.8	4
MAY	0.00	0.0	0	1.55	1.4	1
JUN	3.40	3.9	1	24.38	28.5	4
JUL	0.18	0.6	1	0.01	0.8	1
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.09	1.0	1
OCT	2.25	2.2	1	5.25	5.6	2
NOV	4.75	4.6	1	46.65	54.4	4
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	14.26 12	20.5 12.0	7 12	120.12 12	188.5 12.0	24 12
PERCENTAGE OF PLANT EFFLUENT	0.18%			1.55%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : TUCKERSMITH	REGION : SOUTHWEST
PLANT : VAN ASTRA WPCP	DISTRICT : HURON
WORKS NUMBER : 110003013	OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MUN DRAIN TO BAYFIELD R.	MINOR BASIN : HURON
	MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.405
 POPULATION SERVED : 770
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	5.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	0.00 12	5.0 12.0	0 12	0.00 12	0.0 12.0	0 12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : WALKERTON
 PLANT : WALKERTON WPCP
 WORKS NUMBER : 120001489
 WATERCOURSE : SAUGEEN RIVER

REGION : SOUTHWEST
 DISTRICT : BRUCE
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 7.546
 POPULATION SERVED : 4,591
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0	0.00		0
FEB						
MAR	0.75	7.9	3	0.00	0.0	0
APR	0.00		0	0.00		0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL						
AUG	0.00		0	0.00		0
SEP	0.00	0.0	0	0.00	0.0	0
OCT						
NOV	0.00	0.0	0	0.00	0.0	0
DEC						
TOTAL OBSERVATIONS	0.75 8	7.9 5.0	3 8	0.00 8	0.0 5.0	0 8
PERCENTAGE OF PLANT EFFLUENT	0.04%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : WALLACEBURG
PLANT : WALLACEBURG WPCP
WORKS NUMBER : 110000784
WATERCOURSE : SYDENHAM RIVER

REGION : SOUTHWEST
DISTRICT : KENT
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 6.819
POPULATION SERVED : 10,056
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	1.8	0	0.00	0.0	0
JUN	0.00	14.9	0	0.00	0.0	0
JUL	0.00	0.3	0	0.00	0.0	0
AUG	0.00	4.0	0	0.00	0.0	0
SEP	0.00	3.3	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.6	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	0.00 12	24.9 12.0	0 12	0.00 12	0.0 12.0	0 12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : WINDSOR
PLANT : LITTLE RIVER WPCP
WORKS NUMBER : 120001096
WATERCOURSE : LITTLE RIVER

REGION : SOUTHWEST
DISTRICT : ESSEX
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 36.368
POPULATION SERVED : 64,000
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	47.90	101.0	15			
FEB	0.00	0.0	0			
MAR	43.40	129.0	11			
APR	101.50	193.0	13			
MAY	8.10	17.0	1			
JUN	0.00	0.0	0			
JUL	108.70	82.0	4			
AUG	0.00	0.0	0			
SEP	5.20	1.0	1			
OCT	0.00	0.0	0			
NOV	0.00	0.0	0			
DEC	9.40	20.0	1			
TOTAL OBSERVATIONS	324.20 12	543.0 12.0	46 12	0.00 0	0.0 0.0	0 0
PERCENTAGE OF PLANT EFFLUENT	2.40%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : WINDSOR
 PLANT : WESTERLY WPCP
 WORKS NUMBER : 120001103
 WATERCOURSE : DETROIT RIVER

REGION : SOUTHWEST
 DISTRICT : ESSEX
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 163.656
 POPULATION SERVED : 123,000
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	2.10	2.0	1			
FEB	0.00	0.0	0			
MAR	15.33	5.0	1			
APR	37.30	8.0	2			
MAY	25.40	7.0	2			
JUN	34.90	11.0	3			
JUL	117.70	26.0	3			
AUG	5.80	2.0	2			
SEP	36.10	13.0	5			
OCT	42.20	13.0	3			
NOV	14.20	5.0	1			
DEC	3.50	2.0	1			
TOTAL OBSERVATIONS	334.53 12	94.0 12.0	24 12	0.00 0	0.0 0.0	0 0
PERCENTAGE OF PLANT EFFLUENT	0.78%			0.00%		

WEST CENTRAL REGION

1989 BYPASS OCCURRENCES

MUNICIPALITY : BRANTFORD
 PLANT : BRANTFORD WPCP
 WORKS NUMBER : 110000043
 WATERCOURSE : GRAND RIVER

REGION : WEST CENTRAL
 DISTRICT : BRANT
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 81.818
 POPULATION SERVED : 73,000
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0			
FEB						
MAR	0.00	0.0	0			
APR	0.00	0.0	0			
MAY	0.00	0.0	0			
JUN	1700.00	2.8	1			
JUL	0.00	0.0	0			
AUG	0.00	0.0	0			
SEP	0.00	0.0	0			
OCT	0.00	0.0	0			
NOV	0.00	0.0	0			
DEC	0.00	0.0	0			
TOTAL OBSERVATIONS	1,700.00 11	2.8 11.0	1 11	0.00 0	0.0 0.0	0 0
PERCENTAGE OF PLANT EFFLUENT	9.92%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : CAMBRIDGE
 PLANT : GALT WPCP
 WORKS NUMBER : 110000276
 WATERCOURSE : GRAND RIVER

REGION : WEST CENTRAL
 DISTRICT :
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 38.641
 POPULATION SERVED : 50,143
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS					
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES			
JAN	0.14	0.5	0	0.00	0.0	0			
FEB									
MAR									
APR									
MAY	0.00	0.0	0						
JUN	0.00	0.0	0						
JUL	0.00	0.0	0						
AUG	0.00	0.0	1						
SEP	0.00	0.0	0						
OCT	0.00	0.0	1						
NOV									
DEC									
TOTAL	0.14	0.5	2	0.00	0.0	0			
OBSERVATIONS	8	8.0	8	1	1.0	1			
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%					

1989 BYPASS OCCURRENCES

MUNICIPALITY : CAMBRIDGE
 PLANT : HESPELER WPCP
 WORKS NUMBER : 110001033
 WATERCOURSE : SPEED RIVER

REGION : WEST CENTRAL
 DISTRICT :
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 9.319
 POPULATION SERVED : 11,392
 TREATMENT : HIGH RATE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	1	0.00	0.0	1
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV						
DEC						
TOTAL OBSERVATIONS	0.00 10	0.0 10.0	1 10	0.00 10	0.0 10.0	1 10
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : DELHI
 PLANT : DELHI WPCP
 WORKS NUMBER : 120001425
 WATERCOURSE : BIG CREEK

REGION : WEST CENTRAL
 DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 3.182
 POPULATION SERVED : 4,257
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : AEROBIC SINGLE STAGE

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY						
JUN						
JUL						
AUG						
SEP	0.00	0.0	30	0.00	0.0	30
OCT	0.00	0.0	31	0.00	0.0	31
NOV						
DEC						
TOTAL OBSERVATIONS	0.00 2	0.0 2.0	61 2	0.00 2	0.0 2.0	61 2
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : DUNNVILLE
 PLANT : DUNNVILLE WPCP
 WORKS NUMBER : 120001443
 WATERCOURSE : GRAND RIVER

REGION : WEST CENTRAL
 DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 7.728
 POPULATION SERVED : 5,182
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC	0.00	0.7	1			
TOTAL OBSERVATIONS	0.00 1	0.7 1.0	1 1	0.00 0	0.0 0.0	0 0
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : FERGUS
 PLANT : FERGUS WPCP
 WORKS NUMBER : 110000249
 WATERCOURSE : GRAND RIVER

REGION : WEST CENTRAL
 DISTRICT : WELLINGTON
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 5.001
 POPULATION SERVED : 6,050
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	0.08	0.5	1			
APR						
MAY						
JUN	0.11	2.8	1			
JUL						
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	1	0.00	0.0	1
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.04	1.5	1			
DEC						
TOTAL	0.23	4.8	4	0.00	0.0	1
OBSERVATIONS	6	6.0	6	3	3.0	3
PERCENTAGE OF PLANT EFFLUENT	0.02%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : FORT ERIE
 PLANT : ANGER AVE.WPCP
 WORKS NUMBER : 120001292
 WATERCOURSE : NIAGARA RIVER

REGION : WEST CENTRAL
 DISTRICT : NIAGARA, REG. MUN.
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 16.366
 POPULATION SERVED : 13,765
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY		0.7				
JUN		0.7				
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	0.00	1.4	0	0.00	0.0	0
OBSERVATIONS	0	2.0	0	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : FORT ERIE
 PLANT : CRYSTAL BEACH WPCP
 WORKS NUMBER : 120001283
 WATERCOURSE : LAKE ERIE

REGION : WEST CENTRAL
 DISTRICT : NIAGARA, REG. MUN.
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 3.887
 POPULATION SERVED : 4,095
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY				18.10		1
JUN				28.30		1
JUL				0.09		1
AUG				44.00		1
SEP				1.16		1
OCT				0.24		1
NOV				5.20		1
DEC						
TOTAL	0.00	0.0	0	97.09	0.0	7
OBSERVATIONS	0	0.0	0	7	0.0	7
PERCENTAGE OF PLANT EFFLUENT	0.00%			7.51%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : GRAND VALLEY
 PLANT : GRAND VALLEY WPCP
 WORKS NUMBER : 110000301
 WATERCOURSE : GRAND RIVER

REGION : WEST CENTRAL
 DISTRICT : DUFFERIN
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 0.600
 POPULATION SERVED : 1,060
 TREATMENT : OXIDATION DITCH
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY						
JUN						
JUL						
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	30	0.00	0.0	30
OCT	0.00	0.0	0	0.00	0.0	0
NOV						
DEC						
TOTAL OBSERVATIONS	0.00 3	0.0 3.0	30 3	0.00 3	0.0 3.0	30 3
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : HALDIMAND
 PLANT : CALEDONIA WPCP
 WORKS NUMBER : 120001452
 WATERCOURSE : GRAND RIVER

REGION : WEST CENTRAL
 DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 2.273
 POPULATION SERVED : 5,655
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.79	3.5	1
MAY	0.00	0.0	0	1.15	4.3	1
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	2.87	12.8	1
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	2.75	11.0	1
OCT	0.00	0.0	0	0.00	0.0	0
NOV						
DEC						
TOTAL OBSERVATIONS	0.00 10	0.0 10.0	0 10	7.57 10	31.6 10.0	4 10
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.82%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : HALDIMAND
 PLANT : CAYUGA WPCP
 WORKS NUMBER : 110000089
 WATERCOURSE : GRAND RIVER

REGION : WEST CENTRAL
 DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 0.909
 POPULATION SERVED : 1,258
 TREATMENT : OXIDATION DITCH
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.28	7.0	1
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	2.58	24.0	2
MAY	0.00	0.0	0	2.19	30.0	2
JUN	0.00	0.0	0	1.16	13.5	1
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV				0.43	6.0	1
DEC						
TOTAL OBSERVATIONS	0.00 10	0.0 10.0	0 10	6.66 11	80.5 11.0	7 11
PERCENTAGE OF PLANT EFFLUENT	0.00%			3.59%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : HALDIMAND
 PLANT : HAGERSVILLE WPCP
 WORKS NUMBER : 110001024
 WATERCOURSE : SANDUSK CREEK

REGION : WEST CENTRAL
 DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.000
 POPULATION SERVED : 2,268
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : AEROBIC SINGLE STAGE

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	1	0.00	0.0	1
AUG	0.00	0.0	1	0.00	0.0	1
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV						
DEC						
TOTAL OBSERVATIONS	0.00 10	0.0 10.0	2 10	0.00 10	0.0 10.0	2 10
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : HAMILTON	REGION : WEST CENTRAL
PLANT : WOODWARD AVE.WPCP	(OFFSITE DISTRICT : HAMILTON-WENTWORTH, REG. MUN.
WORKS NUMBER : 120001504	OP AUTHORITY : MUNICIPAL
WATERCOURSE : REDHILL CREEK	MINOR BASIN : ONTARIO
	MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 409.140
 POPULATION SERVED : 300,000
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN		0.0			4.0	
FEB		0.0			0.0	
MAR		22.0			154.1	
APR		9.0			62.5	
MAY		25.5			141.9	
JUN		3.0			70.9	
JUL		0.0			19.4	
AUG		0.0			5.0	
SEP	15.20		4		37.1	
OCT		0.0			11.9	
NOV		13.5			67.5	
DEC		6.0			8.6	
TOTAL	15.20	79.0	4	0.00	582.9	0
OBSERVATIONS	1	11.0	1	0	12.0	0
PERCENTAGE OF PLANT EFFLUENT	0.01%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : KITCHENER
 PLANT : KITCHENER WPCP
 WORKS NUMBER : 110000374
 WATERCOURSE : GRAND RIVER

REGION : WEST CENTRAL
 DISTRICT :
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 122.742
 POPULATION SERVED : 138,271
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY	0.00		0			
JUN	0.00		0			
JUL	0.00		1			
AUG	0.00		0			
SEP	0.00		1			
OCT	204.00	240.0	8			
NOV	0.00		0			
DEC	0.00		1			
TOTAL	204.00	240.0	11	0.00	0.0	0
OBSERVATIONS	8	1.0	8	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.82%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : NANTICOKE
 PLANT : PORT DOVER WPCP
 WORKS NUMBER : 110000604
 WATERCOURSE : LAKE ERIE

REGION : WEST CENTRAL
 DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 4.091
 POPULATION SERVED : 4,750
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB	0.00	0.0	0	0.00	0.0	28
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0			
MAY	0.00	0.0	0		0.0	
JUN	0.00	0.0	0			
JUL	0.00	0.0	0			
AUG	0.00	0.0	0			
SEP	0.00	0.0	0			
OCT	0.00	0.0	0	0.00		1
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	0.00 11	0.0 11.0	0 11	0.00 5	0.0 5.0	29 5
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : NIAGARA FALLS
 PLANT : STAMFORD WPCP
 WORKS NUMBER : 120001363
 WATERCOURSE : CHIPPAWA POWER CANAL

REGION : WEST CENTRAL
 DISTRICT : NIAGARA, REG. MUN.
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 58.189
 POPULATION SERVED : 67,835
 TREATMENT : ROTATING BIOLOGICAL CONTACTOR
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB	10.90	2.7	1			
MAR	238.20	14.5	1			
APR	291.30	24.5	1			
MAY	592.00	70.3	1			
JUN						
JUL						
AUG	113.65	2.5	1			
SEP		15.5				
OCT		15.0				
NOV		11.5				
DEC		11.0				
TOTAL	1,246.05	167.5	5	0.00	0.0	0
OBSERVATIONS	5	9.0	5	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	6.05%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : ORANGEVILLE
 PLANT : ORANGEVILLE WPCP
 WORKS NUMBER : 110000542
 WATERCOURSE : CREDIT RIVER

REGION : WEST CENTRAL
 DISTRICT : DUFFERIN
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 14.547
 POPULATION SERVED : 16,515
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY						
JUN						
JUL	0.00	0.0	31	0.00	0.0	31
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV						
DEC						
TOTAL OBSERVATIONS	0.00 4	0.0 4.0	31 4	0.00 4	0.0 4.0	31 4
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : SIMCOE
 PLANT : SIMCOE WPCP
 WORKS NUMBER : 110000677
 WATERCOURSE : LYNN RIVER

REGION : WEST CENTRAL
 DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 15.456
 POPULATION SERVED : 13,355
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	31	0.00	0.0	31
FEB	0.00	0.0	27	0.00	0.0	27
MAR	0.00		31	0.00		31
APR	0.00		30			
MAY	0.00		31	0.00		31
JUN						
JUL	0.00		31	0.00		31
AUG	0.00		31	0.00		31
SEP	0.00		0	0.00		0
OCT	0.00		31	0.00		31
NOV	0.00		30			
DEC	0.00		31			
TOTAL OBSERVATIONS	0.00 11	0.0 2.0	304 11	0.00 8	0.0 2.0	213 8
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : SOUTH DUMFRIES
 PLANT : ST GEORGE PV WPCP
 WORKS NUMBER : 110003415
 WATERCOURSE : FAIRCHILD CREEK (W. BR)

REGION : WEST CENTRAL
 DISTRICT : BRANT
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ERIE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.064
 POPULATION SERVED : 500
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB						
MAR						
APR						
MAY						
JUN	0.00	0.0	0	0.00	0.0	0
JUL						
AUG						
SEP						
OCT						
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00		0			
TOTAL	0.00	0.0	0	0.00	0.0	0
OBSERVATIONS	5	1.0	5	1	1.0	1
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : ST CATHARINES
 PLANT : PORT DALHOUSIE WPCP
 WORKS NUMBER : 120001327
 WATERCOURSE : LAKE ONTARIO

REGION : WEST CENTRAL
 DISTRICT : NIAGARA, REG. MUN.
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 61.371
 POPULATION SERVED : 60,430
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR		14.0				
APR		16.0				
MAY		44.2				
JUN		16.5				
JUL		10.0				
AUG		2.0				
SEP		9.0				
OCT	9.50		4			
NOV		9.7				
DEC	10.00		1			
TOTAL	19.50	121.4	5	0.00	0.0	0
OBSERVATIONS	2	8.0	2	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.12%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : ST CATHARINES
 PLANT : PORT WELLER WPCP
 WORKS NUMBER : 120001318
 WATERCOURSE : PORT WELLER HARBOUR

REGION : WEST CENTRAL
 DISTRICT : NIAGARA, REG. MUN.
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 37.505
 POPULATION SERVED : 75,690
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY	141.11		1			
JUN						
JUL	11.53		1			
AUG	.55		1			
SEP	20.62		1			
OCT	2.79		1			
NOV	42.01		1			
DEC	.84		1			
TOTAL OBSERVATIONS	219.98 7	0.0 0.0	7 7	0.00 0	0.0 0.0	0 0
PERCENTAGE OF PLANT EFFLUENT	15 %			0.00%		

CENTRAL REGION

1989 BYPASS OCCURRENCES

MUNICIPALITY : BOBCAYGEON REGION : CENTRAL
 PLANT : BOBCAGEON WPCP(SUMM.POP.SERVEDDISTRICT : VICTORIA
 WORKS NUMBER : 110002498 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 WATERCOURSE : BOBCAYGEON RIVER MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 3.055
 POPULATION SERVED : 1,610
 TREATMENT : EXTENDED AERATION -
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		31	0.00		31
FEB	0.00		28	0.00		28
MAR						
APR					0.0	
MAY						
JUN						
JUL	0.00	0.0	1	0.00	0.0	1
AUG	0.00	0.0	2	0.00	0.0	2
SEP	0.00	0.0	1	0.00	0.0	1
OCT	0.00	0.0	1	0.00	0.0	1
NOV	0.00	0.0	1	0.00	0.0	1
DEC	0.00		31	0.00		31
TOTAL OBSERVATIONS	0.00 8	0.0 5.0	96 8	0.00 8	0.0 6.0	96 8
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : BURLINGTON
 PLANT : SKYWAY WPCP
 WORKS NUMBER : 110000070
 WATERCOURSE : HAMILTON HARBOUR

REGION : CENTRAL
 DISTRICT : HALTON, REG. MUN.
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 93.193
 POPULATION SERVED : 120,100
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0	0.00		0
FEB				0.92		0
MAR						
APR				0.17		0
MAY				0.08		0
JUN				0.13		0
JUL				0.20		0
AUG				2.33	18.0	1
SEP				13.12		1
OCT				1.33	7.0	1
NOV				10.87	32.0	1
DEC						
TOTAL	0.00	0.0	0	29.18	57.0	4
OBSERVATIONS	1	0.0	1	10	3.0	10
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.12%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : COLDWATER
 PLANT : COLDWATER WPCP
 WORKS NUMBER : 110001596
 WATERCOURSE : COLDWATER RIVER

REGION : CENTRAL
 DISTRICT : SIMCOE
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 0.546
 POPULATION SERVED : 1,015
 TREATMENT : EXTENDED AERATION
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC	0.25	4.0	1			
TOTAL OBSERVATIONS	0.25 1	4.0 1.0	1 1	0.00 0	0.0 0.0	0 0
PERCENTAGE OF PLANT EFFLUENT	0.15%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : HALTON HILLS
 PLANT : ACTON WPCP + LAGOON
 WORKS NUMBER : 120001023
 WATERCOURSE : BLACK CREEK

REGION : CENTRAL
 DISTRICT : HALTON, REG. MUN.
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 4.546
 POPULATION SERVED : 7,478
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0	0.00		0
FEB	0.00		0	0.00		0
MAR	0.00		0	0.00		0
APR	0.00		0	0.00		0
MAY	0.00		0	0.00		0
JUN	0.00		0	0.00		0
JUL	0.00	0.0	0			
AUG	0.00	0.0	0	0.00	0.0	0
SEP	127.00	148.0	3	35.40	6.3	3
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	127.00 12	148.0 6.0	3 12	35.40 11	6.3 5.0	3 11
PERCENTAGE OF PLANT EFFLUENT	13.52%			3.77%		

1989 BYPASS OCCURRENCES

MUNICIPALITY :	METRO TORONTO	REGION :	CENTRAL
PLANT :	HUMBER WPCP (ETOBICOKE)	DISTRICT :	METRO TORONTO, MUN. OF
WORKS NUMBER :	120000382	OP AUTHORITY :	MUNICIPAL
WATERCOURSE :	LAKE ONTARIO	MINOR BASIN :	ONTARIO
		MAJOR BASIN :	GREAT LAKES

DESIGN CAPACITY : 409.140
 POPULATION SERVED : 540,000
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0	0.00		0
FEB	0.00		0	0.00		0
MAR	0.00		0	0.00		0
APR	0.00	0.0	0	0.00		0
MAY	0.00		0	0.00		0
JUN	0.00	0.0	0	48.55	10.5	3
JUL	0.00		0	0.00		0
AUG	0.00		0	0.00		0
SEP	0.00	0.0	0	0.00		0
OCT	0.00		0	0.44	0.1	1
NOV	0.00		0	0.00		0
DEC	0.00		0	0.00		0
TOTAL OBSERVATIONS	0.00 12	0.0 3.0	0 12	48.99 12	10.6 2.0	4 12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.03%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : METRO TORONTO
 PLANT : MAIN WPCP (TORONTO)
 WORKS NUMBER : 120000391
 WATERCOURSE : LAKE ONTARIO

REGION : CENTRAL
 DISTRICT : METRO TORONTO, MUN. OF
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 818.280
 POPULATION SERVED : 1,250,000
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0	0.00		0
FEB	0.00		0	0.00		0
MAR	0.00		0	0.00		0
APR	0.00	0.0	0	0.00		0
MAY	0.00		0	0.00		0
JUN	0.00	0.0	0	2.60	9.5	2
JUL	0.00		0	0.40	2.0	1
AUG	0.00		0	0.30	1.0	1
SEP	0.40	4.5	1	4.50		1
OCT	0.00		0	0.10	4.6	1
NOV	0.00		0	1.66	6.5	2
DEC	0.00	0.0	0	0.00		0
TOTAL OBSERVATIONS	0.40 12	4.5 4.0	1 12	9.56 12	23.6 5.0	8 12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : MIDLAND
 PLANT : MIDLAND WPCP
 WORKS NUMBER : 110000463
 WATERCOURSE : MIDLAND BAY

REGION : CENTRAL
 DISTRICT : SIMCOE
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 13.680
 POPULATION SERVED : 12,538
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		1	0.00		1
FEB	0.00		0	0.00		0
MAR	0.00		0	0.00		0
APR	0.00		0	0.00		0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	0.00 12	0.0 8.0	1 12	0.00 12	0.0 8.0	1 12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : MILTON
 PLANT : MILTON WPCP
 WORKS NUMBER : 120001014
 WATERCOURSE : OAKVILLE CREEK

REGION : CENTRAL
 DISTRICT : HALTON, REG. MUN.
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 12.911
 POPULATION SERVED : 23,203
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 : EFFLUENT POLISHING

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0	0.00		0
FEB	0.00		0	0.00		0
MAR	0.00		0	0.00		0
APR	0.00		0	0.00		0
MAY	0.00		0	0.00		0
JUN	0.06		0	0.00		0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00		0	0.00		0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	0.06 12	0.0 5.0	0 12	0.00 12	0.0 5.0	0 12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : MISSISSAUGA
 PLANT : CLARKSON WPCP SOUTH-PEEL
 WORKS NUMBER : 110001328
 WATERCOURSE : LAKE ONTARIO

REGION : CENTRAL
 DISTRICT : PEEL, REG. MUN.
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 109.104
 POPULATION SERVED : 150,000
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	36.40		1	4.54	1.0	1
FEB						
MAR						
APR						
MAY						
JUN	0.00		2		0.0	
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	36.40	0.0	3	4.54	1.0	1
OBSERVATIONS	2	0.0	2	1	2.0	1
PERCENTAGE OF PLANT EFFLUENT	0.12%			7.5%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : NEWCASTLE
 PLANT : PORT DARLINGTON WPCP
 WORKS NUMBER : 120003076
 WATERCOURSE : LAKE ONTARIO

REGION : CENTRAL
 DISTRICT : DURHAM, REG. MUN.
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 4.546
 POPULATION SERVED : 12,831
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR	3.36	14.0	1			
MAY	4.32	24.0	1			
JUN	7.44	23.0	1			
JUL						
AUG						
SEP						
OCT						
NOV				3.16	46.0	3
DEC						
TOTAL	15.12	61.0	3	3.16	46.0	3
OBSERVATIONS	3	3.0	3	1	1.0	1
PERCENTAGE OF PLANT EFFLUENT	0.49%			0.10%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : OAKVILLE
 PLANT : SOUTH WEST WPCP
 WORKS NUMBER : 120001005
 WATERCOURSE : LAKE ONTARIO

REGION : CENTRAL
 DISTRICT : HALTON, REG. MUN.
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 47.733
 POPULATION SERVED : 58,200
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC				0.20	0.5	1
TOTAL OBSERVATIONS	0.00 0	0.0 0.0	0 0	0.20 1	0.5 1.0	1 1
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : ORILLIA
 PLANT : ORILLIA WPCP
 WORKS NUMBER : 120000569
 WATERCOURSE : LAKE SIMCOE

REGION : CENTRAL
 DISTRICT : SIMCOE
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 21.045
 POPULATION SERVED : 24,000
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	31.82	30.0	0			
FEB						
MAR				21.78	101.0	0
APR				48.00	222.5	0
MAY	2.95	5.2	2			
JUN				2.95	5.2	2
JUL						
AUG				0.04	1.0	1
SEP	3.38	4.0	1			
OCT				0.16	0.5	1
NOV				22.75	133.0	3
DEC						
TOTAL	38.15	39.2	3	95.70	463.2	7
OBSERVATIONS	3	3.0	3	6	6.0	6
PERCENTAGE OF PLANT EFFLUENT	0.52%			1.29%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : PENETANGUISHENE
 PLANT : FOX ST. WPCP
 WORKS NUMBER : 120001960
 WATERCOURSE : PENETANGUISHENE HARBOUR

REGION : CENTRAL
 DISTRICT : SIMCOE
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.500
 POPULATION SERVED : 2,100
 TREATMENT : CONTACT STABILIZATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC		0.7				
TOTAL OBSERVATIONS	0.00 0	0.7 1.0	0 0	0.00 0	0.0 0.0	0 0
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : PENETANGUISHENE	REGION : CENTRAL
PLANT : PENETANGUISHENE WPCP MAIN ST	DISTRICT : SIMCOE
WORKS NUMBER : 120000541	OP AUTHORITY : MUNICIPAL
WATERCOURSE : PENETANG BAY	MINOR BASIN : HURON
	MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 3.000
 POPULATION SERVED : 4,800
 TREATMENT : CONTACT STABILIZATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY						
JUN		16.0				
JUL						
AUG	1.50	5.5	1			
SEP		0.7	2			
OCT	0.00					
NOV		19.0				
DEC						
TOTAL	1.50	41.2	3	0.00	0.0	0
OBSERVATIONS	2	4.0	2	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.16%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : PETERBOROUGH
 PLANT : PETERBOROUGH WPCP
 WORKS NUMBER : 120000676
 WATERCOURSE : OTONABEE RIVER

REGION : CENTRAL
 DISTRICT : PETERBOROUGH
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 68.190
 POPULATION SERVED : 62,945
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0	0.00		0
FEB	0.00		0	0.00		0
MAR	0.00		0	0.00		0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00		0	2.08	6.0	1
JUN	0.00		0	4.86	15.0	3
JUL	0.00		0	0.00		0
AUG	0.00		1	12.50	7.0	1
SEP	0.00		0	26.52	15.0	2
OCT	0.00		0	1.70	4.5	1
NOV	0.00	0.0	1	30.50	60.0	5
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	0.00	0.0	2	78.18	107.5	13
OBSERVATIONS	12	3.0	12	12	8.0	12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.41%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : WHITBY
 PLANT : CORBETT CREEK WPCP
 WORKS NUMBER : 120000738
 WATERCOURSE : LAKE ONTARIO

REGION : CENTRAL
 DISTRICT : DURHAM, REG. MUN.
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 36.368
 POPULATION SERVED : 26,100
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY						
JUN	0.00	0.0	0	0.00	0.0	0
JUL						
AUG	0.00	0.0	0	0.00	0.0	0
SEP	1.23	5.0	1	0.00	0.0	1
OCT		0.0		0.00	0.0	0
NOV	0.00	0.0	0	122.27	7.0	2
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	1.23 9	5.0 10.0	1 9	122.27 10	7.0 10.0	3 10
PERCENTAGE OF PLANT EFFLUENT	0.01%			1.32%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : WHITBY	REGION : CENTRAL
PLANT : PRINGLE CREEK WPCP NO 1	DISTRICT : DURHAM, REG. MUN.
WORKS NUMBER : 120000747	OP AUTHORITY : MUNICIPAL
WATERCOURSE : PRINGLE CREEK	MINOR BASIN : ONTARIO
	MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 5.683
 POPULATION SERVED : 10,925
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC				0.70	23.0	1
TOTAL OBSERVATIONS	0.00 0	0.0 0.0	0 0	0.70 1	23.0 1.0	1 1
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.07%		

SOUTHEAST REGION

1989 BYPASS OCCURRENCES

MUNICIPALITY : ARNPRIOR
 PLANT : ARNPRIOR WPCP
 WORKS NUMBER : 120000621
 WATERCOURSE : MADAWASKA RIVER

REGION : SOUTHEAST
 DISTRICT : RENFREW
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 6.819
 POPULATION SERVED : 5,800
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	0.60	11.0	2	0.00	0.0	0
APR						
MAY	0.23	2.0	2			
JUN	0.50	3.5	3			
JUL	0.64	4.3	4			
AUG	0.10	0.8	2			
SEP	0.68	4.0	2			
OCT	0.46	3.5	2			
NOV	0.16	1.5	1			
DEC						
TOTAL	3.38	30.6	18	0.00	0.0	0
OBSERVATIONS	8	8.0	8	1	1.0	1
PERCENTAGE OF PLANT EFFLUENT	0.17%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : BARRY'S BAY
 PLANT : BARRY'S BAY WPCP
 WORKS NUMBER : 110001854
 WATERCOURSE : KAMANISKEG LAKE

REGION : SOUTHEAST
 DISTRICT : RENFREW
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.241
 POPULATION SERVED : 1,413
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR	0.00	0.0	31	0.00	0.0	31
MAY	0.00	0.0	31	0.00	0.0	31
JUN	0.00	0.0	30	0.00	0.0	30
JUL	0.00	0.0	30	0.00	0.0	31
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL OBSERVATIONS	0.00 4	0.0 4.0	122 4	0.00 4	0.0 4.0	123 4
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY :	BELLEVILLE	REGION :	SOUTHEAST
PLANT :	BELLEVILLE WPCP (163500 M3/D.PDISTRICT :	HASTINGS	
WORKS NUMBER :	110000016	OP AUTHORITY :	MINISTRY OF THE ENVIRONMENT
WATERCOURSE :	BAY OF QUINTE	MINOR BASIN :	ONTARIO
		MAJOR BASIN :	GREAT LAKES

DESIGN CAPACITY : 54.552
 POPULATION SERVED : 35,351
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN				118.90	632.0	31
FEB	8.00		1	14.45		28
MAR	0.00	0.0	0	30.02	112.0	31
APR	0.00	0.0	0	135.40	356.0	17
MAY	0.00	0.0	0	27.30	147.0	31
JUN	0.00	0.0	30	34.09	107.0	30
JUL	0.00	0.0	31	0.00	0.0	31
AUG	0.00	0.0	31	0.00	0.0	31
SEP	0.00	0.0	30	0.00	0.0	30
OCT	0.00	0.0	31	69.23	74.0	31
NOV	64.00	0.0	30	373.56	385.0	30
DEC						
TOTAL	72.00	0.0	184	802.95	1,813.0	321
OBSERVATIONS	10	9.0	10	11	10.0	11
PERCENTAGE OF PLANT EFFLUENT	0.86%			9.55%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : BROCKVILLE
 PLANT : BROCKVILLE WPCP
 WORKS NUMBER : 120000122
 WATERCOURSE : ST.LAWRENCE RIVER

REGION : SOUTHEAST
 DISTRICT : LEEDS AND GRENVILLE
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ST. LAWRENCE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 21.820
 POPULATION SERVED : 20,607
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	2.0	0			
FEB	0.00		0			
MAR	0.00		0			
APR	0.00		0			
MAY	0.00		0			
JUN	0.00		0			
JUL	6.81		1			
AUG	0.00		1			
SEP	0.00		0			
OCT	0.00		0			
NOV	0.00		0			
DEC	0.00		1			
TOTAL	6.81	2.0	3	0.00	0.0	0
OBSERVATIONS	12	1.0	12	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.10%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : CARLETON PLACE
 PLANT : CARLETON PLACE WPCP
 WORKS NUMBER : 110000971
 WATERCOURSE : MISSISSIPPI RIVER

REGION : SOUTHEAST
 DISTRICT : LANARK
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 5.455
 POPULATION SERVED : 6,600
 TREATMENT : HIGH RATE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	1.38	1.0	1			
FEB						
MAR	5.54	372.0	10			
APR	40.07	352.0	20	0.00	0.0	0
MAY	29.30	292.0	19	0.00	0.0	0
JUN	0.00		0	0.00		0
JUL	0.00	0.0	0	0.00	0.0	0
AUG						
SEP	0.00		0	0.00		0
OCT						
NOV	0.00	26.0	12			
DEC						
TOTAL OBSERVATIONS	76.29 8	1,043.0 6.0	62 8	0.00 5	0.0 3.0	0 5
PERCENTAGE OF PLANT EFFLUENT	5.22%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : COBDEN
 PLANT : COBDEN WPCP
 WORKS NUMBER : 120000596
 WATERCOURSE : MUSKRAT RIVER

REGION : SOUTHEAST
 DISTRICT : RENFREW
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 0.682
 POPULATION SERVED : 1,035
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0			
FEB	0.00	0.0	0			
MAR	1.03	32.0	4			
APR	0.00	0.0	0			
MAY	0.00	0.0	0			
JUN	0.00	0.0	0			
JUL	0.60	6.0	1			
AUG	0.00	0.0	0			
SEP	0.33	4.0	1			
OCT	0.05	1.0	1			
NOV	0.00		0			
DEC	0.00		0			
TOTAL OBSERVATIONS	2.01 12	43.0 9.0	7 12	0.00 0	0.0 0.0	0 0
PERCENTAGE OF PLANT EFFLUENT	0.81%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : DEEP RIVER
 PLANT : DEEP RIVER WPCP
 WORKS NUMBER : 120000612
 WATERCOURSE : OTTAWA RIVER

REGION : SOUTHEAST
 DISTRICT : RENFREW
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 2.182
 POPULATION SERVED : 4,230
 TREATMENT : PRIMARY
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	1.81		1			
MAR						
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.68	6.0	1	0.00	0.0	0
OCT	0.00		0	0.00		0
NOV	0.00		0	0.00		0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	2.49 11	6.0 8.0	2 11	0.00 10	0.0 8.0	0 10
PERCENTAGE OF PLANT EFFLUENT	0.40%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : DELORO
 PLANT : DELORO WPCP
 WORKS NUMBER : 120000970
 WATERCOURSE : MOIRA RIVER

REGION : SOUTHEAST
 DISTRICT : HASTINGS
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.746
 POPULATION SERVED : 157
 TREATMENT : COMMUNAL SEPTIC TANK
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB				2.27	9.5	2
MAR				4.05	16.9	3
APR				58.88	245.3	13
MAY				59.19	246.6	9
JUN				29.85	124.4	7
JUL				0.00	0.0	0
AUG						
SEP				0.00	0.0	0
OCT						
NOV				40.84	170.1	11
DEC						
TOTAL OBSERVATIONS	0.00 0	0.0 0.0	0 0	195.08 8	812.8 8.0	45 8
PERCENTAGE OF PLANT EFFLUENT	0.40%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : DESERONTO
 PLANT : DESERONTO WPCP
 WORKS NUMBER : 110000980
 WATERCOURSE : BAY OF QUINTE

REGION : SOUTHEAST
 DISTRICT : HASTINGS
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.364
 POPULATION SERVED : 1,732
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	0	0.00	0.0	0
JUN						
JUL						
AUG						
SEP						
OCT						
NOV	4.32	48.0	30			
DEC						
TOTAL	4.32	48.0	30	0.00	0.0	0
OBSERVATIONS	3	3.0	3	2	2.0	2
PERCENTAGE OF PLANT EFFLUENT	1.07%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : EGANVILLE
 PLANT : EGANVILLE WPCP
 WORKS NUMBER : 110000141
 WATERCOURSE : BONNECHERE RIVER

REGION : SOUTHEAST
 DISTRICT : RENFREW
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 0.764
 POPULATION SERVED : 1,219
 TREATMENT : EXTENDED AERATION
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00		1	0.00		1
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP						
OCT						
NOV						
DEC						
TOTAL	0.00	0.0	1	0.00	0.0	1
OBSERVATIONS	6	5.0	6	6	5.0	6
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : ERNESTOWN
 PLANT : ODESSA WPCP
 WORKS NUMBER : 110002041
 WATERCOURSE : MILLHAVEN CREEK

REGION : SOUTHEAST
 DISTRICT : LENNOX & ADDINGTON
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 0.909
 POPULATION SERVED : 973
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR	0.00	3.0	0	0.00	0.0	0
MAY						
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL OBSERVATIONS	0.00 3	3.0 3.0	0 3	0.00 3	0.0 3.0	0 3
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : GLOUCESTER
 PLANT : GREEN CREEK WPCP
 WORKS NUMBER : 120000729
 WATERCOURSE : OTTAWA RIVER

REGION : SOUTHEAST
 DISTRICT : OTTAWA-CARLETON, REG. MUN.
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 363.680
 POPULATION SERVED : 450,000
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY		2.3				
JUN						
JUL						
AUG						
SEP						
OCT						
NOV	0.00	161.0	13	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	0.00 6	163.3 7.0	13 6	0.00 6	0.0 6.0	0 6
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : HAGARTY & RICHARDS
 PLANT : KILLALOE STN.WPCP
 WORKS NUMBER : 110001532
 WATERCOURSE : BRUDENELL CREEK

REGION : SOUTHEAST
 DISTRICT : RENFREW
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 0.518
 POPULATION SERVED : 670
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR	0.00	0.0	31	0.00		31
MAY	0.00	0.0	31	0.00	0.0	31
JUN	0.00	0.0	30	0.00	0.0	30
JUL	0.00	0.0	31	0.00	0.0	31
AUG						
SEP						
OCT						
NOV						
DEC	0.00		31			
TOTAL	0.00	0.0	154	0.00	0.0	123
OBSERVATIONS	5	4.0	5	4	3.0	4
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : HAWKESBURY
 PLANT : HAWKESBURY WPCP
 WORKS NUMBER : 110002283
 WATERCOURSE : OTTAWA RIVER

REGION : SOUTHEAST
 DISTRICT : PRESCOTT AND RUSSELL
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 12.274
 POPULATION SERVED : 9,680
 TREATMENT : MODIFIED ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	6.21	1.2	2			
FEB	0.51	0.1	1			
MAR	125.92	24.3	5			
APR	14.51	2.8	2			
MAY	2.07	0.4	2			
JUN	24.35	4.7	8			
JUL	14.51	2.8	4			
AUG	31.61	6.1	4			
SEP	12.95	2.5	2			
OCT	35.75	6.9	5			
NOV	67.36	13.0	8			
DEC	6.21	1.2	1			
TOTAL	342.01	66.0	44	0.00	0.0	0
OBSERVATIONS	12	12.0	12	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	11.84%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : KINGSTON
 PLANT : KINGSTON WPCP
 WORKS NUMBER : 120001050
 WATERCOURSE : ST.LAWRENCE RIVER

REGION : SOUTHEAST
 DISTRICT : FRONTENAC
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ST. LAWRENCE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 61.371
 POPULATION SERVED : 67,000
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	18.50	7.0	1			
FEB	0.00	0.0	0			
MAR	0.00	0.0	0			
APR	0.00	0.0	0			
MAY	0.00	0.0	0			
JUN	0.00	0.0	0			
JUL	0.00	0.0	0			
AUG	0.00	0.0	0			
SEP	0.00	0.0	0			
OCT	0.00	0.0	0			
NOV	0.00	0.0	0			
DEC	0.00	0.0	0			
TOTAL	18.50	7.0	1	0.00	0.0	0
OBSERVATIONS	12	12.0	12	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.09%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : L'ORIGINAL
 PLANT : L'ORIGINAL WPCP
 WORKS NUMBER : 110001701
 WATERCOURSE : OTTAWA RIVER

REGION : SOUTHEAST
 DISTRICT : PRESCOTT AND RUSSELL
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 0.955
 POPULATION SERVED : 1,523
 TREATMENT : EXTENDED AERATION
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC	1.30	30.0	1			
	7.77	144.5	7			
TOTAL OBSERVATIONS	9.07 2	174.5 2.0	8 2	0.00 0	0.0 0.0	0 0
PERCENTAGE OF PLANT EFFLUENT	3.27%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : NAPANEE
 PLANT : NAPANEE WPCP
 WORKS NUMBER : 120000186
 WATERCOURSE : NAPANEE RIVER

REGION : SOUTHEAST
 DISTRICT : LENNOX & ADDINGTON
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 9.092
 POPULATION SERVED : 7,500
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB	0.00	0.0	0	0.00	0.0	0
MAR				1.09	12.0	1
APR	0.00	0.0	0	5.00	41.5	3
MAY	0.00	0.0	0	0.00	0.0	0
JUN						
JUL						
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	47.30		9	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	47.30	0.0	9	6.09	53.5	4
OBSERVATIONS	8	7.0	8	9	9.0	9
PERCENTAGE OF PLANT EFFLUENT	2.13%			0.27%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : NEPEAN
 PLANT : WATTS CREEK WPCP
 WORKS NUMBER : 120000701
 WATERCOURSE : WATTS CREEK

REGION : SOUTHEAST
 DISTRICT : OTTAWA-CARLETON, REG. MUN.
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 29.549
 POPULATION SERVED : 52,500
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	121.80	140.6	13
APR	0.00	0.0	0	53.60	177.5	26
MAY	0.00	0.0	0	50.40	332.1	31
JUN				21.20		1
JUL				10.70		1
AUG				1.90		1
SEP				1.00		1
OCT	0.00	0.0	0	2.60	7.7	21
NOV	0.00	0.0	0	41.80	182.5	26
DEC	0.00	0.0	0	5.30	6.7	23
TOTAL OBSERVATIONS	0.00 3	0.0 8.0	0 8	310.30 12	847.1 8.0	144 12
PERCENTAGE OF PLANT EFFLUENT	0.00%			3.06%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : OSNABRUCK
 PLANT : INGLESIDE WPCP
 WORKS NUMBER : 120000140
 WATERCOURSE : ST. LAWRENCE RIVER

REGION : SOUTHEAST
 DISTRICT : STORMONT, DUNDAS AND GLENGARR
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ST. LAWRENCE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.573
 POPULATION SERVED : 1,500
 TREATMENT : PRIMARY
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC	0.36	1.0	1			
TOTAL OBSERVATIONS	0.36 1	1.0 1.0	1 1	0.00 0	0.0 0.0	0 0
PERCENTAGE OF PLANT EFFLUENT	0.09%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : PETAWAWA
 PLANT : PETAWAWA WPCP
 WORKS NUMBER : 120000587
 WATERCOURSE : OTTAWA RIVER

REGION : SOUTHEAST
 DISTRICT : RENFREW
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 4.546
 POPULATION SERVED : 9,800
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR	0.00	0.0	30	0.00	0.0	0
MAY						
JUN	0.00	0.0	31	0.00	0.0	0
JUL	0.00	0.0	31	0.00	0.0	0
AUG						
SEP						
OCT	0.00		0	0.00		0
NOV						
DEC						
TOTAL OBSERVATIONS	0.00 4	0.0 3.0	92 4	0.00 4	0.0 3.0	0 4
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : PICTON
 PLANT : PICTON WPCP
 WORKS NUMBER : 120000667
 WATERCOURSE : PICTON BAY

REGION : SOUTHEAST
 DISTRICT : PRINCE EDWARD
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 4.546
 POPULATION SERVED : 4,500
 TREATMENT : CONTACT STABILIZATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	6.31	26.7	4
APR	0.00	0.0	0	1.72	7.3	1
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	0.00 12	0.0 12.0	0 12	8.03 12	34.0 12.0	5 12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.79%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : PRESCOTT
 PLANT : EDWARDSBURGH WPCP
 WORKS NUMBER : 110001122
 WATERCOURSE : ST. LAWRENCE RIVER

REGION : SOUTHEAST
 DISTRICT : LEEDS AND GRENVILLE
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ST. LAWRENCE
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 5.683
 POPULATION SERVED : 4,595
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	24.5	0	0.00	0.0	0
FEB						
MAR	0.00	0.6	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	5.5	0	0.00	0.0	0
JUN						
JUL	0.00		0	0.00		0
AUG						
SEP	0.00	0.0	0	0.00	0.0	0
OCT						
NOV						
DEC						
TOTAL OBSERVATIONS	0.00 6	30.6 5.0	0 6	0.00 6	0.0 5.0	0 6
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : SIDNEY
 PLANT : BATAWA WPCP
 WORKS NUMBER : 110000668
 WATERCOURSE : TRENT RIVER

REGION : SOUTHEAST
 DISTRICT : HASTINGS
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 0.568
 POPULATION SERVED : 300
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB						
MAR						
APR	0.00	0.0	0	1.47	0.0	2
MAY				0.37		1
JUN						
JUL						
AUG						
SEP				0.80		1
OCT				0.23		1
NOV				10.33		9
DEC	0.00		0		0.0	
TOTAL	0.00	0.0	0	13.20	0.0	14
OBSERVATIONS	3	2.0	3	6	3.0	6
PERCENTAGE OF PLANT EFFLUENT	0.00%			8.98%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : SMITHS FALLS
 PLANT : SMITHS FALLS WPCP
 WORKS NUMBER : 120000890
 WATERCOURSE : RIDEAU RIVER

REGION : SOUTHEAST
 DISTRICT : LANARK
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 11.365
 POPULATION SERVED : 11,000
 TREATMENT : PRIMARY
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	2	0.00	0.0	2
FEB	0.00	0.0	0			
MAR	0.00	0.0	0			
APR	0.00	0.0	0			
MAY	0.00	0.0	0	0.00	0.0	0
JUN		5.5		0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP						
OCT						
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	0.00 9	5.5 10.0	2 9	0.00 7	0.0 7.0	2 7
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : TRENTON
 PLANT : TRENTON WPCP
 WORKS NUMBER : 110000775
 WATERCOURSE : BAY OF QUINTE

REGION : SOUTHEAST
 DISTRICT : HASTINGS
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 15.911
 POPULATION SERVED : 15,346
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR	0.00	0.0	0	0.00	0.0	0
MAY						
JUN						
JUL						
AUG						
SEP						
OCT	0.00		0	0.00		0
NOV	21.98		3			
DEC	0.00		0	0.00		0
TOTAL	21.98	0.0	3	0.00	0.0	0
OBSERVATIONS	4	1.0	4	3	1.0	3
PERCENTAGE OF PLANT EFFLUENT	0.59%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : WELLINGTON
 PLANT : WELLINGTON WPCP
 WORKS NUMBER : 120003165
 WATERCOURSE : LAKE ONTARIO

REGION : SOUTHEAST
 DISTRICT : PRINCE EDWARD
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : ONTARIO
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.500
 POPULATION SERVED : 1,077
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0	0.00		0
FEB	0.00		0	0.00		0
MAR	0.00		0	0.00		0
APR	0.00		0	0.00		0
MAY	0.00		0	0.00		0
JUN						
JUL						
AUG	0.16	10.2	2	0.15	8.0	1
SEP	0.03	2.7	1			
OCT						
NOV	0.23	8.0	1			
DEC						
TOTAL	0.43	20.9	4	0.15	8.0	1
OBSERVATIONS	8	3.0	8	6	1.0	6
PERCENTAGE OF PLANT EFFLUENT	0.22%			0.08%		

NORTHEAST REGION

1989 BYPASS OCCURRENCES

MUNICIPALITY : BLACK RIVER MATHESON
 PLANT : MATHESON WPCP
 WORKS NUMBER : 110000025
 WATERCOURSE : BLACK RIVER

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED

DESIGN CAPACITY : 1.046
 POPULATION SERVED : 920
 TREATMENT : EXTENDED AERATION
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	11.0	0	0.00		0
FEB						
MAR	0.00		31			
APR	0.44		30			
MAY	0.00		31			
JUN	0.00		30			
JUL	0.00		31			
AUG	0.00		31			
SEP	0.00		30			
OCT	0.00		31			
NOV	0.00		30			
DEC	0.00		31			
TOTAL	0.44	11.0	306	0.00	0.0	0
OBSERVATIONS	11	1.0	11	1	0.0	1
PERCENTAGE OF PLANT EFFLUENT	0.22%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : BLIND RIVER
 PLANT : BLIND RIVER WPCP
 WORKS NUMBER : 110002416
 WATERCOURSE : LAKE HURON

REGION : NORTHEAST
 DISTRICT : ALGOMA
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 3.500
 POPULATION SERVED : 3,200
 TREATMENT : EXTENDED AERATION
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	5.02	23.0	2			
APR	0.00		0			
MAY						
JUN						
JUL						
AUG						
SEP	0.00		0			
OCT	0.00		0	0.00		0
NOV	0.00		0	0.00		0
DEC						
TOTAL	5.02	23.0	2	0.00	0.0	0
OBSERVATIONS	5	1.0	5	2	0.0	2
PERCENTAGE OF PLANT EFFLUENT	0.82%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : HORNEPAYNE
 PLANT : HORNEPAYNE WPCP
 WORKS NUMBER : 110001952
 WATERCOURSE : JACKFISH RIVER

REGION : NORTHEAST
 DISTRICT : ALGOMA
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED

DESIGN CAPACITY : 1.364
 POPULATION SERVED : 1,675
 TREATMENT : EXTENDED AERATION
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC	0.27	3.3	1			
TOTAL OBSERVATIONS	0.27 1	3.3 1.0	1 1	0.00 0	0.0 0.0	0 0
PERCENTAGE OF PLANT EFFLUENT	0.08%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : IROQUOIS FALLS
 PLANT : IROQUOIS FALLS WPCP
 WORKS NUMBER : 110002121
 WATERCOURSE : ABITIBI RIVER

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED

DESIGN CAPACITY : 4.091
 POPULATION SERVED : 5,575
 TREATMENT : CONTACT STABILIZATION
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY						
JUN	6.82		1			
JUL						
AUG	6.36		1			
SEP						
OCT						
NOV						
DEC						
TOTAL	13.18	0.0	2	0.00	0.0	0
OBSERVATIONS	2	0.0	2	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	1.09%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : KAPUSKASING
 PLANT : KAPUSKASING WPCP
 WORKS NUMBER : 110003004
 WATERCOURSE : KAPUSKASING RIVER

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED

DESIGN CAPACITY : 9.092
 POPULATION SERVED : 12,500
 TREATMENT : EXTENDED AERATION
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		31			
FEB	0.00		28			
MAR	0.00		31			
APR	0.00		25			
MAY						
JUN	0.00		28			
JUL	0.00		31			
AUG	0.00		18			
SEP	0.00		30			
OCT	0.00		20			
NOV	0.00	0.0	26			
DEC	0.00		31			
TOTAL	0.00	0.0	299	0.00	0.0	0
OBSERVATIONS	11	1.0	11	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : KIRKLAND LAKE
 PLANT : KIRKLAND LAKE WPCP
 WORKS NUMBER : 120000015
 WATERCOURSE : MURDOCK CREEK

REGION : NORTHEAST
 DISTRICT : TIMISKAMING
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : OTTAWA RIVER
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 13.638
 POPULATION SERVED : 12,500
 TREATMENT : CONTACT STABILIZATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR	33.41	117.7	16			
MAY	2.64	9.3	8			
JUN	2.69	9.5	5			
JUL	2.61	9.2	1			
AUG	2.33	8.2	1			
SEP						
OCT						
NOV						
DEC						
TOTAL	43.69	153.9	31	0.00	0.0	0
OBSERVATIONS	5	5.0	5	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	1.04%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : MOOSONEE D.A.B.
 PLANT : MOOSONEE WPCP (NORTH)
 WORKS NUMBER : 120000319
 WATERCOURSE : MOOSE RIVER

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED

DESIGN CAPACITY : 0.250
 POPULATION SERVED : 300
 TREATMENT : EXTENDED AERATION
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	29			
FEB	0.00		25			
MAR	0.00		8			
APR	0.00		12			
MAY	0.00		31			
JUN	0.00		26			
JUL	0.00		31			
AUG	0.00		28			
SEP	0.00		29			
OCT	0.00		22			
NOV	0.00		30			
DEC	0.00		31			
TOTAL	0.00	0.0	302	0.00	0.0	0
OBSERVATIONS	12	1.0	12	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : MOOSONEE D.A.B.	REGION : NORTHEAST
PLANT : MOOSONEE WPCP (OLD TOWNSITE)	DISTRICT : COCHRANE
WORKS NUMBER : 110001060	OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : STORE CK TO MOOSE RIVER	MINOR BASIN : JAMES BAY
	MAJOR BASIN : ARCTIC WATERSHED

DESIGN CAPACITY : 0.509
 POPULATION SERVED : 1,500
 TREATMENT : CONTACT STABILIZATION
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		30			
FEB	0.47	35.0	1			
MAR	0.06	4.0	1			
APR	0.00		13			
MAY	0.12	3.5	1			
JUN	0.00		30			
JUL	0.00		31			
AUG	0.00		26			
SEP	0.00		30			
OCT	0.00		22			
NOV	0.00		30			
DEC	0.00		31			
TOTAL OBSERVATIONS	0.65 12	42.5 3.0	246 12	0.00 0	0.0 0.0	0 0
PERCENTAGE OF PLANT EFFLUENT	0.26%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : NICKEL CENTRE
 PLANT : CONISTON WPCP
 WORKS NUMBER : 110000123
 WATERCOURSE : CONISTON CREEK

REGION : NORTHEAST
 DISTRICT : SUDBURY, REG. MUN.
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 3.000
 POPULATION SERVED : 2,790
 TREATMENT : OXIDATION DITCH
 : CONVENTIONAL ACTIVATED SLUDGE
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	4.80	28.5	0			
APR	1.73	11.3	0			
MAY						
JUN	4.90		2			
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	11.44	39.8	2	0.00	0.0	0
OBSERVATIONS	3	2.0	3	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	2.41%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : NORTH BAY
 PLANT : NORTH BAY WPCP
 WORKS NUMBER : 110000533
 WATERCOURSE : LAKE NIPISSING

REGION : NORTHEAST
 DISTRICT : NIPPISSING
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 36.368
 POPULATION SERVED : 48,000
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	31	0.00	0.0	31
FEB	0.00		27	0.00		27
MAR	0.00		31	0.00		31
APR	0.00		30	0.00		30
MAY	0.00		31	0.00		31
JUN	0.00	0.0	30	0.00		30
JUL	0.00		31	0.00		30
AUG	0.00		31	0.00		31
SEP	0.00		30	0.00		30
OCT	0.00		31	0.00		31
NOV	0.00		30	0.00		30
DEC	0.00		31	0.00		31
TOTAL	0.00	0.0	364	0.00	0.0	363
OBSERVATIONS	12	2.0	12	12	1.0	12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : PARRY SOUND
 PLANT : PARRY SOUND WPCP
 WORKS NUMBER : 110000560
 WATERCOURSE : MC CURRY LAKE

REGION : NORTHEAST
 DISTRICT : PARRY SOUND
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 6.592
 POPULATION SERVED : 5,500
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	30			
FEB	0.00		28			
MAR	0.00		31			
APR	0.00		29			
MAY	0.00		31			
JUN	0.00		0			
JUL	0.00		31			
AUG	0.00		30			
SEP	0.00		28			
OCT	0.00		31			
NOV	0.00		29			
DEC	0.00		31			
TOTAL	0.00	0.0	329	0.00	0.0	0
OBSERVATIONS	12	1.0	12	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : RAYSIDE-BALFOUR
 PLANT : CHELMSFORD WPCP
 WORKS NUMBER : 120001568
 WATERCOURSE : WHITSON RIVER

REGION : NORTHEAST
 DISTRICT : SUDBURY, REG. MUN.
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 3.068
 POPULATION SERVED : 4,934
 TREATMENT : EXTENDED AERATION
 : CONTACT STABILIZATION
 : PHOSPHORUS REMOVAL-CONTINUOUS

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC	12.73	48.0	2			
TOTAL OBSERVATIONS	12.73 1	48.0 1.0	2 1	0.00 0	0.0 0.0	0 0
PERCENTAGE OF PLANT EFFLUENT	0.91%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : SAULT STE MARIE
 PLANT : WEST END WPCP
 WORKS NUMBER : 110002540
 WATERCOURSE : ST MARY'S RIVER

REGION : NORTHEAST
 DISTRICT : ALGOMA
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 18.184
 POPULATION SERVED : 80,000
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.1	31	0.0	0.0	0
FEB	0.20		1			
MAR	0.50		1			
APR	0.20		1			
MAY	0.10		1			
JUN	0.00		27			
JUL	2.50		1			
AUG	1.70		1			
SEP	1.00		1			
OCT	3.90		1			
NOV						
DEC	0.00		31			
TOTAL	10.10	0.1	97	0.00	0.0	0
OBSERVATIONS	11	1.0	11	0	1.0	0
PERCENTAGE OF PLANT EFFLUENT	0.38%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : SMOOTH ROCK FALLS
 PLANT : SMOOTH ROCK FALLS WPCP
 WORKS NUMBER : 110002130
 WATERCOURSE : MATTAGAMI RIVER

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED

DESIGN CAPACITY : 1.637
 POPULATION SERVED : 2,251
 TREATMENT : EXTENDED AERATION
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY						
JUN	0.00		30			
JUL	0.00		1			
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	0.00	0.0	31	0.00	0.0	0
OBSERVATIONS	2	0.0	2	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : STURGEON FALLS
PLANT : STURGEON FALLS WPCP
WORKS NUMBER : 110001435
WATERCOURSE : STURGEON RIVER

REGION : NORTHEAST
DISTRICT : NIPPISSING
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 4.546
POPULATION SERVED : 6,040
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		31			
FEB	0.00		28			
MAR						
APR	0.00		30			
MAY						
JUN	0.00		30			
JUL						
AUG	0.00		31			
SEP						
OCT	0.00		31			
NOV						
DEC	0.00		31			
TOTAL	0.00	0.0	212	0.00	0.0	0
OBSERVATIONS	7	0.0	7	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : SUDBURY
 PLANT : SUDBURY WPCP
 WORKS NUMBER : 110000711
 WATERCOURSE : JUNCTION CREEK

REGION : NORTHEAST
 DISTRICT : SUDBURY, REG. MUN.
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 68.190
 POPULATION SERVED : 95,000
 TREATMENT : HIGH RATE
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	162.99		6			
APR	120.05		8			
MAY						
JUN	100.00	52.5	4	45.50	34.0	2
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	383.04	52.5	18	45.50	34.0	2
OBSERVATIONS	3	1.0	3	1	1.0	1
PERCENTAGE OF PLANT EFFLUENT	2.52%			0.30%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : TIMMINS
PLANT : MATTAGAMI WPCP
WORKS NUMBER : 110000766
WATERCOURSE : MATTAGAMI RIVER

REGION : NORTHEAST
DISTRICT : COCHRANE
OP AUTHORITY : MUNICIPAL
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED

DESIGN CAPACITY : 34.095
POPULATION SERVED : 33,000
TREATMENT : PRIMARY
:
:

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC	2.80		1			
TOTAL OBSERVATIONS	2.80 1	0.0 0.0	1 1	0.00 0	0.0 0.0	0 0
PERCENTAGE OF PLANT EFFLUENT	0.04%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : TIMMINS
 PLANT : WHITNEY & TISDALE WPCP
 WORKS NUMBER : 110001391
 WATERCOURSE : PORCUPINE RIVER

REGION : NORTHEAST
 DISTRICT : COCHRANE
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED

DESIGN CAPACITY : 6.819
 POPULATION SERVED : 7,300
 TREATMENT : CONTACT STABILIZATION
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	1.98	8.1	1			
APR	19.44	3.3	1			
MAY	4.24	17.3	1			
JUN	2.33	9.5	0			
JUL						
AUG	4.37	17.8	1			
SEP						
OCT						
NOV						
DEC						
TOTAL	32.37	56.0	4	0.00	0.0	0
OBSERVATIONS	5	5.0	5	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	2.18%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : VALLEY EAST	REGION : NORTHEAST
PLANT : HAMNER, VAL-CARON, VAL-THERESE	WDISTRICT : SUDBURY, REG. MUN.
WORKS NUMBER : 110001541	OP AUTHORITY : MUNICIPAL
WATERCOURSE : VERMILION RIVER	MINOR BASIN : HURON
	MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 11.365
 POPULATION SERVED : 17,337
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC	34.00	156.0	0			
TOTAL OBSERVATIONS	34.00 1	156.0 1.0	0 1	0.00 0	0.0 0.0	0 0
PERCENTAGE OF PLANT EFFLUENT	1.20%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : WALDEN
 PLANT : LIVELY WPCP
 WORKS NUMBER : 120001185
 WATERCOURSE : MEATBIRD CREEK

REGION : NORTHEAST
 DISTRICT : SUDBURY, REG. MUN.
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : HURON
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.591
 POPULATION SERVED : 3,669
 TREATMENT : EXTENDED AERATION
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	7.78		3			
APR	1.10		1			
MAY						
JUN	0.65	10.5	2			
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	9.53	10.5	6	0.00	0.0	0
OBSERVATIONS	3	1.0	3	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	1.80%			0.00%		

NORTHWEST REGION

1989 BYPASS OCCURRENCES

MUNICIPALITY : ATIKOKAN
 PLANT : ATIKOKAN WPCP
 WORKS NUMBER : 110001523
 WATERCOURSE : ATIKOKAN RIVER

REGION : NORTHWEST
 DISTRICT : RAINY RIVER
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : LAKE WINNIPEG EAST
 MAJOR BASIN : NELSON RIVER

DESIGN CAPACITY : 4.082
 POPULATION SERVED : 4,500
 TREATMENT : EXTENDED AERATION
 : PHOSPHORUS REMOVAL-CONTINUOUS
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		1			
FEB	0.00		1			
MAR						
APR						
MAY						
JUN	0.14	3.0	1	0.00	0.0	0
JUL	0.02	1.5	1	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.18	2.8	1	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	0.35 9	7.3 7.0	5 9	0.00 7	0.0 7.0	0 7
PERCENTAGE OF PLANT EFFLUENT	0.03%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : DRYDEN
 PLANT : DRYDEN WPCP
 WORKS NUMBER : 120000248
 WATERCOURSE : WABIGOON RIVER

REGION : NORTHWEST
 DISTRICT : KENORA
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : LAKE WINNIPEG EAST
 MAJOR BASIN : NELSON RIVER

DESIGN CAPACITY : 6.819
 POPULATION SERVED : 6,900
 TREATMENT : CONTACT STABILIZATION
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	1.81	4.0	1	0.37	1.5	1
FEB						
MAR						
APR						
MAY	0.99	4.0	1			
JUN						
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	2.81	8.0	2	0.37	1.5	1
OBSERVATIONS	2	2.0	2	1	1.0	1
PERCENTAGE OF PLANT EFFLUENT	0.19%			0.03%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : EAR FALLS
 PLANT : EAR FALLS WPCP
 WORKS NUMBER : 110001006
 WATERCOURSE : ENGLISH RIVER

REGION : NORTHWEST
 DISTRICT : KENORA
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : LAKE WINNIPEG EAST
 MAJOR BASIN : NELSON RIVER

DESIGN CAPACITY : 2.864
 POPULATION SERVED : 1,750
 TREATMENT : EXTENDED AERATION
 : CONVERTIBLE OPERATING MODE
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB				0.00	0.0	0
MAR				0.00	0.0	0
APR				0.00	0.0	0
MAY				0.00	0.0	0
JUN				0.00	0.0	0
JUL				0.00	0.0	0
AUG				0.00	0.0	0
SEP	0.01	2.5	1	0.00	0.0	0
OCT				0.00	0.0	0
NOV				0.00	0.0	0
DEC						
TOTAL	0.01	2.5	1	0.00	0.0	0
OBSERVATIONS	1	1.0	1	10	10.0	10
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : FORT FRANCES
 PLANT : FORT FRANCES WPCP
 WORKS NUMBER : 110000258
 WATERCOURSE : RAINY RIVER

REGION : NORTHWEST
 DISTRICT : RAINY RIVER
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : LAKE WINNIPEG EAST
 MAJOR BASIN : NELSON RIVER

DESIGN CAPACITY : 9.092
 POPULATION SERVED : 8,750
 TREATMENT : PRIMARY
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	1	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	0.00 11	0.0 11.0	1 11	0.00 11	0.0 11.0	0 11
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : GERALDTON
 PLANT : GERALDTON WPCP
 WORKS NUMBER : 110001649
 WATERCOURSE : LAKE KENOGAMISIS

REGION : NORTHWEST
 DISTRICT : THUNDER BAY
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : JAMES BAY
 MAJOR BASIN : ARCTIC WATERSHED

DESIGN CAPACITY : 1.814
 POPULATION SERVED : 2,901
 TREATMENT : EXTENDED AERATION
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN				0.00	0.0	0
FEB				0.00	0.0	0
MAR				0.00	0.0	0
APR	4.94	0.0	7	0.00	0.0	0
MAY	5.19	0.0	7	0.00	0.0	0
JUN	0.54	0.0	1	0.00	0.0	0
JUL				0.00	0.0	0
AUG				0.00	0.0	0
SEP				0.00	0.0	0
OCT				0.00	0.0	0
NOV				0.00	0.0	0
DEC				0.00	0.0	0
TOTAL OBSERVATIONS	10.67 3	0.0 3.0	15 3	0.00 12	0.0 12.0	0 12
PERCENTAGE OF PLANT EFFLUENT	1.68%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : GOLDEN
 PLANT : BALMERTOWN WPCP
 WORKS NUMBER : 110003291
 WATERCOURSE : BALMER CREEK

REGION : NORTHWEST
 DISTRICT : KENORA
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : LAKE WINNIPEG EAST
 MAJOR BASIN : NELSON RIVER

DESIGN CAPACITY : 1.227
 POPULATION SERVED : 1,300
 TREATMENT : EXTENDED AERATION
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB	0.00	0.0	0	0.00	0.0	0
MAR						
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	1	0.00	0.0	0
JUN	0.50	16.0	1	0.00	0.0	0
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL OBSERVATIONS	0.50 4	16.0 4.0	2 4	0.00 4	0.0 4.0	0 4
PERCENTAGE OF PLANT EFFLUENT	0.13%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : KENORA
 PLANT : KENORA WPCP
 WORKS NUMBER : 120000239
 WATERCOURSE : WINNIPEG RIVER

REGION : NORTHWEST
 DISTRICT : KENORA
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : LAKE WINNIPEG EAST
 MAJOR BASIN : NELSON RIVER

DESIGN CAPACITY : 18.184
 POPULATION SERVED : 12,000
 TREATMENT : EXT AERATION/CONT STABLIZATION
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC					10.0	
TOTAL OBSERVATIONS	0.00 0	0.0 0.0	0 0	0.00 0	10.0 1.0	0 0
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : MARATHON
 PLANT : MARATHON WPCP
 WORKS NUMBER : 120000471
 WATERCOURSE : LAKE SUPERIOR

REGION : NORTHWEST
 DISTRICT : THUNDER BAY
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : SUPERIOR
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 4.400
 POPULATION SERVED : 5,000
 TREATMENT : EXTENDED AERATION
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.16	2.0	1	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	0.16 12	2.0 12.0	1 12	0.00 12	0.0 12.0	0 12
PERCENTAGE OF PLANT EFFLUENT	0.02%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : RED ROCK
 PLANT : RED ROCK WPCP
 WORKS NUMBER : 120001817
 WATERCOURSE : NIPIGON BAY

REGION : NORTHWEST
 DISTRICT : THUNDER BAY
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : SUPERIOR
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.273
 POPULATION SERVED : 1,150
 TREATMENT : PRIMARY
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0			
FEB	0.00		0	0.00		0
MAR	0.00		0	0.00		0
APR	0.00		0	0.00		0
MAY	0.18		0			
JUN						
JUL	0.00		0			
AUG	0.00		0			
SEP	0.00		0			
OCT	0.00		0			
NOV	0.00		0			
DEC						
TOTAL OBSERVATIONS	0.18 10	0.0 0.0	0 10	0.00 3	0.0 0.0	0 3
PERCENTAGE OF PLANT EFFLUENT	0.06%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : SCHREIBER
 PLANT : SCHREIBER WPCP
 WORKS NUMBER : 110002112
 WATERCOURSE : CREEK TO L.SUPERIOR

REGION : NORTHWEST
 DISTRICT : THUNDER BAY
 OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
 MINOR BASIN : SUPERIOR
 MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.137
 POPULATION SERVED : 1,937
 TREATMENT : EXTENDED AERATION
 : CONTACT STABILIZATION
 : CONVERTIBLE OPERATING MODE

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	24.0	10	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL OBSERVATIONS	0.00 12	24.0 12.0	10 12	0.00 12	0.0 12.0	0 12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : SIOUX LOOKOUT
 PLANT : SIOUX LOOKOUT WPCP
 WORKS NUMBER : 120000220
 WATERCOURSE : PELICAN LAKE

REGION : NORTHWEST
 DISTRICT : KENORA
 OP AUTHORITY : MUNICIPAL
 MINOR BASIN : LAKE WINNIPEG EAST
 MAJOR BASIN : NELSON RIVER

DESIGN CAPACITY : 2.273
 POPULATION SERVED : 3,006
 TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
 :
 :

PLANT BYPASS				SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0	1.32		1
FEB	0.00		0	0.00		0
MAR	0.00		0	0.00		0
APR	0.00		0	0.00		0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG						
SEP						
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00		0	0.00		0
DEC	0.00	0.0	0	0.00		0
TOTAL OBSERVATIONS	0.00 10	0.0 5.0	0 10	1.32 10	0.0 4.0	1 10
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.20%		



TD/527/05/R46/MOE
Ontario Ministry of the En
Report on the 1989
discharges from
adrv
c.2 a aa